

BOWDOIN COLLEGE

CATALOGUE FOR 1984-1985



BRUNSWICK, MAINE

August 1984

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COLLEGE

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August 1984

In its employment and admissions practices Bowdoin is in conformity with all applicable federal and state statutes and regulations. It does not discriminate on the basis of age, race, color, sex, marital status, religion, creed, ancestry, national and ethnic origin, physical or mental handicap.

The information in this catalogue was accurate at the time of publication. However, the College is a dynamic community and must reserve the right to make changes in its course offerings, degree requirements, regulations, procedures, and charges.

Bowdoin College supports the efforts of secondary school officials and governing bodies to have their schools achieve regional accredited status to provide reliable assurance of the quality of the educational preparation of its applicants for admission.

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College Calendar

1984

183rd Academic Year

August 27, Monday. Rooms ready for occupancy.

August 27-30, Monday-Thursday. Orientation.

August 31, Friday. Fall semester begins at 8:00 A.M. All students required to be in residence. Freshman and upperclass registration.

August 31, Friday. Opening of College Convocation.

September 3, Monday. First classes of the fall semester.

September 21-22, Friday-Saturday. Meetings of the Governing Boards.

September 22, Saturday. Homecoming.

October 12, Friday. James Bowdoin Day.

October 13, Saturday. Parents Day.

October 17, Wednesday. Fall vacation begins at the end of morning classes.

October 22, Monday. Fall vacation ends, 8:00 A.M.

November 21, Wednesday. Thanksgiving vacation begins at the end of morning classes.

November 26, Monday. Thanksgiving vacation ends, 8:00 A.M.

November 26, Monday. Last day for filing applications for scholarship aid during the spring semester.

December 8-12, Saturday-Wednesday. Reading period (at the option of each instructor).

December 13-19, Thursday-Wednesday. Fall semester examinations.

1985

January 16, Wednesday. First classes of the spring semester, 8:00 A.M.

March 1-2, Friday-Saturday. Meetings of the Governing Boards.

March 15, Friday. Spring vacation begins at the end of morning classes.

April 1, Monday. Spring vacation ends, 8:00 A.M.

April 1, Monday. Last day for filing applications for scholarship aid during the 1985-1986 academic year.

April 26, Friday. Last day for filing applications for graduate scholarships.

May 4-9, Saturday-Thursday. Reading period (at the option of each instructor).

May 10-16, Friday-Thursday. Spring semester examinations.

May 24-25, Friday-Saturday. Meetings of the Governing Boards.

May 25, Saturday. The 180th Commencement Exercises.

1985

184th Academic Year

August 26, Monday. Rooms ready for occupancy.

August 26-August 29. Monday-Thursday. Orientation.

August 30, Friday. Fall semester begins at 8:00 A.M. All students required to be in residence. Freshman and upperclass registration.

August 30, Friday. Opening of College Convocation.

September 2, Monday. First classes of the fall semester.

September 28, Saturday. Homecoming.

October 4, Friday. James Bowdoin Day.

October 5, Saturday. Parents Day.

October 11-12, Friday-Saturday. Meetings of the Governing Boards.

October 16, Wednesday. Fall vacation begins at the end of morning classes.

October 21, Monday. Fall vacation ends, 8:00 A.M.

November 27, Wednesday. Thanksgiving vacation begins at the end of morning classes.

December 2, Monday. Thanksgiving vacation ends, 8:00 A.M.

December 2, Monday. Last day for filing applications for scholarship aid during the spring semester.

December 7-11, Saturday-Wednesday. Reading period (at the option of each instructor).

December 12-18, Thursday-Wednesday. Fall semester examinations.

1986

January 15, Wednesday. First classes of the spring semester, 8:00 A.M.

March 7-8, Friday-Saturday. Meetings of the Governing Boards.

March 14, Friday. Spring vacation begins at the end of morning classes.

March 31, Monday. Spring vacation ends, 8:00 A.M.

March 31, Monday. Last day for filing applications for scholarship aid during the 1986-1987 academic year.

- April 25, Friday. Last day for filing applications for graduate scholarships.
- May 3-8, Saturday-Thursday. Reading period (at the option of each instructor).
- May 9-15, Friday-Thursday. Spring semester examinations.
- May 23-24, Friday-Saturday. Meetings of the Governing Boards.
- May 24, Saturday. The 181st Commencement Exercises.

1986

185th Academic Year

- August 25, Monday. Rooms ready for occupancy.
- August 25-28, Monday-Thursday. Orientation.
- August 29, Friday. Fall semester begins at 8:00 A.M. All students required to be in residence. Freshman and upperclass registration.
- August 29, Friday. Opening of College Convocation.
- September 1, Monday. First classes of the fall semester.
- September 20, Friday. James Bowdoin Day.
- September 21, Saturday. Parents Day.
- October 11, Saturday. Homecoming.
- October 15, Wednesday. Fall vacation begins at the end of morning classes.
- October 17-18, Friday-Saturday. Meetings of the Governing Boards.
- October 20, Monday. Fall vacation ends, 8:00 A.M.
- November 26, Wednesday. Thanksgiving vacation begins at the end of morning classes.
- December 1, Monday. Thanksgiving vacation ends, 8:00 A.M.
- December 1, Monday. Last day for filing applications for scholarship aid during the spring semester.
- December 6-10, Saturday-Wednesday. Reading period.
- December 11-17, Thursday-Wednesday. Fall semester examinations.

1987

- January 14, Wednesday. First classes of the spring semester, 8:00 A.M.
- March 6-7, Friday-Saturday. Meetings of the Governing Boards.
- March 13, Friday. Spring vacation begins at the end of morning classes.
- March 30, Monday. Spring vacation ends, 8:00 A.M.
- March 30, Monday. Last day for filing applications for scholarship aid during the 1987-1988 academic year.

April 24, Friday. Last day for filing applications for graduate scholarships.

May 2-7, Saturday-Thursday. Reading period.

May 8-14, Friday-Thursday. Spring semester examinations.

May 22-23, Friday-Saturday. Meetings of the Governing Boards.

May 23, Saturday. The 182nd Commencement Exercises.

1984

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The Purpose of the College

BOWDOIN COLLEGE believes strongly that there is an intrinsic value in a liberal arts education, for the individual student, for the College as an institution, and for society as a whole. Historically, the arrangement of courses and instruction that combine to produce liberal arts education has changed and undoubtedly will continue to change, but certain fundamental and underlying goals remain constant.

It is difficult to define these goals without merely repeating old verities, but certain points are critical. The thrust of a liberal arts education is not the acquisition of a narrow, technical expertise; it is not a process of coating young people with a thin veneer of "civilization." That is not to say that liberal arts education in any way devalues specific knowledge or the acquisition of fundamental skills. On the contrary, an important aspect of sound liberal arts education is the development of the power to read with critical perception, to think coherently, to write effectively, to speak with force and clarity, and to act as a constructive member of society. But liberal arts education seeks to move beyond the acquisition of specific knowledge and skills toward the acquisition of an understanding of man, nature, and the interaction of the two and toward the development of a characteristic style of thought which is informed, questioning, and marked by the possession of intellectual courage. When defined in terms of its intended product, the purpose of the College is to train professionally competent people of critical and innovative mind, who can grapple with the technical complexities of our age and whose flexibility and concern for humanity are such that they offer us a hope of surmounting the increasing depersonalization and dehumanization of our world. The College does not seek to transmit a specific set of values; rather, it recognizes a formidable responsibility to teach students what values are and to encourage them to develop their own.

Liberal arts education is, in one sense, general, because it is concerned with many different areas of human behavior and endeavor, many civilizations of the world, many different aspects of the human environment. It seeks to encourage the formation of habits of curiosity, rigorous observation, tolerant understanding, and considered judgment, while at the same time fostering the development of varied modes of communicative and artistic expression. This concern for breadth and for the appreciation of varying modes of perception is combined with a commitment to study some particular field of learning in sufficient depth to ensure relative mastery of its content and methods. In short, a liberal arts education aims at fostering the development of modes of learning, analysis, judgment, and expression which are essential both to subsequent professional training and to the ongoing process of self-

The Purpose of the College

education by which one refines one's capacity to function autonomously as an intellectual and moral being.

To achieve these goals, the individuals who teach at the College must strive constantly to live up to their commitment in their course offerings; likewise students must have an equal commitment to do so in their course selections. The commitment is a collective one on the part of the entire college community. Each of the academic components of the College is under a heavy obligation to make its field of study accessible in some manner to the entire student body and to satisfy the needs of the nonmajor as well as those of the specialist.

The College is not and should not be a cloister or monastic retreat from the problems of the world. Rather, the College is a collection of people deeply and passionately involved in their community, their nation, and their world. When liberal arts education is faithful to its mission, it encourages and trains young people who are sensitive to the crucial problems of our time and who have the kind of mind and the kind of inspiration to address them fearlessly and directly. This is its goal and the standard by which it should be judged.

*A statement prepared by the Faculty-Student Committee
on Curriculum and Educational Policy, 1976.*

Historical Sketch

BOWDOIN COLLEGE was established by charter from the General Court of Massachusetts on June 24, 1794, after repeated petitions to the commonwealth by citizens who wanted to provide educational opportunity in the District of Maine, then a rapidly growing frontier. Various names for the new institution were considered; the choice of "Bowdoin" was influenced both by a desire to honor the late distinguished governor of the commonwealth, James Bowdoin II, and by intimations received from his son, James Bowdoin III, of a substantial gift toward endowment. Brunswick was selected as the site for the College in 1796, but the erection of a building to house the College was not accomplished until 1802 because it had been difficult to convert into cash the lands that had been granted by the General Court. On September 2 of that year, the Reverend Joseph McKeen was installed as the first president of the College. On the next day Bowdoin began its active educational life with eight students and one faculty member in addition to the president.

The story of Bowdoin in its early years is an index to its entire history. Its first president was a man of religion and of science. Its first benefactor was a distinguished diplomat, statesman, and gentleman of broad culture; and the inheritance of his extensive library, his scientific instruments, and his fine collection of art established at the College a lasting conviction of the wisdom of strength in these areas of institutional resources. Its original Board was composed of strongly religious men, individually devoted to the Congregational Church as thoroughly as they were to the democratic ideals of a new nation.

The curriculum during the early years was rigidly prescribed and strong in the classics. In the field of science, mathematics was soon joined by the study of chemistry and mineralogy. Though small in size, the College had some of the greatest teachers it has known, and among the early graduates were several marked for future fame: for instance, Nathan Lord (1809), for thirty-five years president of Dartmouth; Seba Smith (1818), early humorist; Jacob Abbott (1820), prolific author of the "Rollo" books; William Pitt Fessenden (1823), for a short time President Lincoln's secretary of the treasury; Franklin Pierce (1824), fourteenth president of the United States; Nathaniel Hawthorne and Henry Wadsworth Longfellow, both of the Class of 1825; and John Brown Russwurm, of the Class of 1826, Bowdoin's first black graduate, publisher, and governor of the colony of Maryland in Liberia at the time of his death in 1851.

In 1820 the College established a medical school, which in the 101 years of its existence produced many well-trained doctors who practiced in Maine and, to a lesser extent, elsewhere. It is believed that two members of the Class of

1849 were among the first black doctors to receive medical degrees in the United States. In 1921, when the needed clinical facilities and technical equipment had become too complex and expensive for a small institution to supply, it was deemed expedient to discontinue the school.

Bowdoin was established more on faith than endowment, and its finances suffered severely in the aftermath of the panic of 1837. However, its growth was slow and steady. Social fraternities appeared on the campus in the 1840s, followed by organized athletics in the late 1850s. The *Bowdoin Orient*, which claims to be the oldest continuously published college weekly in the country, appeared first in 1871. As the controversy over slavery worked towards a climax, the home of Professor Smyth was a station of the "underground railroad" for escaped slaves; and here, in another professorial household, was written the book that was to arouse the conscience of a nation, *Uncle Tom's Cabin*. During the Civil War the College sent into the service a greater number of men in proportion to its size than any other college in the North.

The twenty years following the Civil War were the most critical in the history of the College. After President Harris's short term of four years (1867-1871), Joshua Lawrence Chamberlain, Maine's most distinguished war hero and governor of the state for four terms following his return to civilian life, was elected president. During these two administrations the curriculum was modernized somewhat, but the establishment of an engineering school in 1871 was unsuccessful, since it survived for only ten years. Its most famous graduate was Admiral Robert E. Peary (1877), who led the first expedition to reach the North Pole.

President Chamberlain, for all his great services to college, state, and nation, was unequal to coping with the difficulties now besetting the institution: inadequate endowment and equipment, a decreasing enrollment, dissension among the faculty and Boards. Probably no one else connected with either group could have succeeded in the circumstances. Chamberlain's resignation in 1883 provided an opportunity to secure from outside the College the vigorous leadership imperatively needed.

The inauguration in 1885, after a two-year interregnum, of the Reverend William DeWitt Hyde marks the real beginning of another era. He brought to his task of rejuvenating the institution a boundless physical capacity that was matched by his awareness of a modern and changing world and by scholarly ability that made his national reputation an ornament to Bowdoin. He built the College figuratively and literally, introducing new subjects into the curriculum and enlarging the physical facilities on the campus by over 100 percent. Under him, enrollment increased from 119 in 1885 to 400 in 1915 and the endowment rose from \$378,273 to \$2,312,868. He emphasized teaching as the responsibility of the College and learning as the responsibility of the students. His vigor impregnated the whole life and spirit of the College. It was

under President Hyde that Bowdoin's philosophy of its students and of its faculty members as responsible, independent individuals became fixed.

Kenneth C. M. Sills succeeded President Hyde after the latter's death in 1917. He was a natural successor (though not a slavish disciple) of President Hyde. He carried forward his predecessor's program, seeing the College successfully through the upheavals concomitant to two wars. Under him, Bowdoin gradually emerged from being a "country college" to a new and increasingly respected status as a countrywide college. Physical facilities were improved and increased. The faculty grew from thirty-two to eighty-one; enrollment, from 400 to double that figure; and endowment, from \$2,473,451 to \$12,312,274. Student activities were expanded, and the fraternity system was developed into a cooperative and democratic component of student life.

President Sills was succeeded by James Stacy Coles in the fall of 1952. During his fifteen-year tenure, Bowdoin met the rapidly changing demands of society and students by adopting curricular innovations, expanding the size of its faculty, and improving its facilities at a faster pace than during any comparable period in its history. It was during these years that Bowdoin thoroughly revised its curriculum, extended honors work to all gifted students, introduced independent study courses, initiated an undergraduate research fellowship program, and started its pioneering Senior Year Program. To accomplish these academic improvements, the College expanded the size of its faculty by over a third, to 109, and raised salaries to a level which has enabled it to continue attracting and retaining outstanding teachers. The value of the College's plant showed a similar dramatic increase. Dayton Arena, Morrell Gymnasium, Chamberlain Hall, Wentworth Hall, Coles Tower, Coleman Hall, Gibson Hall, and Hawthorne-Longfellow Library were constructed. Pickard Theater was constructed in Memorial Hall; Massachusetts Hall, Hubbard Hall, and three dormitories were renovated; and the Moulton Union and Dudley Coe Health Center were enlarged.

President Coles resigned at the end of 1967. Following the acting presidency of Athern P. Daggett, Roger Howell, Jr., a member of Bowdoin's Class of 1958, Rhodes scholar, and chairman of the Department of History, became the tenth president of the College on January 1, 1969. Only thirty-two at the time of his election, Dr. Howell had already achieved international eminence as a scholar of British history.

Under his leadership Bowdoin expanded its curriculum to include Afro-American studies, a major in biochemistry, and courses concerned with the environment. In 1970 it admitted women undergraduates and began an expansion of its enrollment from 950 to 1,350. Other accomplishments included the development of a highly sophisticated computing center, an increase in student representation in the governance of the College, and the successful start of a ten-year, \$37,775,000 fund-raising campaign.

President Howell resigned on June 30, 1978, and returned to full-time teaching at the College. Willard F. Enteman, provost of Union College, was inaugurated Bowdoin's eleventh president on September 22, 1978.

Dr. Enteman resigned on December 31, 1980, and Professor A. LeRoy Greason became Bowdoin's acting president on January 1, 1981. Dr. Greason, a graduate of Wesleyan University, holds graduate degrees from Harvard. He has been a member of the Department of English since 1952. During that time he also served as Dean of Students for four years and Dean of the College for nine years.

On October 9, 1981, Dr. Greason was inaugurated the twelfth president of Bowdoin College, the fourth member of the faculty to be named to the office.

During his presidency, distribution requirements have been reestablished and the curriculum has been revised to include a Department of Computer Science and Information Studies and to emphasize writing for freshmen and greater challenges for upperclassmen in advanced courses and in interdisciplinary programs. The Governing Boards have revised their by-laws to strengthen the presidency and to provide for a more effective development of policies. On May 25, 1984, the Governing Boards voted to launch a new capital campaign to increase endowment, enlarge the faculty, expand the scholarship fund, improve facilities, and meet other capital needs.

Officers of Government

PRESIDENT OF THE COLLEGE

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), President of the College.

THE PRESIDENT AND TRUSTEES

Everett Parker Pope, B.S., A.M. (Bowdoin), Chairman. Elected Overseer, 1961; elected Trustee, 1977. First term expires 1985.

Rosalynne Spindel Bernstein, A.B. (Radcliffe). Elected Overseer, 1973; elected Trustee, 1981. First term expires 1989.

Paul Peter Brontas, A.B. (Bowdoin), B.A., M.A. (Oxford), J.D., LL.B. (Harvard). Elected Overseer, 1974; elected Trustee, 1984. First term expires 1992.

Leonard Wolsey Cronkhite, Jr., A.B. (Bowdoin), M.D. (Harvard), LL.D. (Bowdoin, Northeastern), L.H.D. (Curry). Elected Overseer, 1969; elected Trustee, 1970. Term expires 1994.

William Plummer Drake, A.M., LL.D. (Bowdoin). Elected Overseer, 1955; elected Trustee, 1970. Term expires 1988.

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), President of the College, ex officio. Elected 1981.

Merton Goodell Henry, A.B. (Bowdoin), LL.B. (George Washington), LL.D. (Bowdoin). Elected Overseer, 1962; elected Trustee, 1974. Term expires 1990.

John Roscoe Hupper, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1970; elected Trustee, 1982. First term expires 1990.

Roscoe Cunningham Ingalls, Jr., B.S. (Bowdoin). Elected Overseer, 1968; elected Trustee, 1973. Term expires 1989.

John Francis Magee, A.B. (Bowdoin), M.B.A. (Harvard), A.M. (Maine). Elected Overseer, 1972; elected Trustee, 1979. First term expires 1987.

Frederick Gordon Potter Thorne, A.B. (Bowdoin). Elected Overseer, 1972; elected Trustee, 1982. First term expires 1990.

Winthrop Brooks Walker, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1966; elected Trustee, 1970. Term expires 1990.

Richard Arthur Wiley, A.B. (Bowdoin), B.C.L. (Oxford), LL.M. (Har-

vard). Elected Overseer, 1966; elected Trustee, 1981. First term expires 1989.

TRUSTEES EMERITI

John Lincoln Baxter, A.B., A.M., LL.D. (Bowdoin). Elected Overseer, 1941; elected Trustee, 1954; elected emeritus, 1972.

James Stacy Coles, B.S. (Mansfield), A.B., A.M., Ph.D. (Columbia), D.Sc. (New Brunswick), LL.D. (Brown, Maine, Colby, Columbia, Middlebury, Bowdoin), Sc.D. (Merrimack). President of the College, 1952-1967; elected emeritus, 1977.

Sanford Burnham Cousins, A.B., LL.D. (Bowdoin). Elected Overseer, 1950; elected Trustee, 1959; elected emeritus, 1974.

David Watson Daly Dickson, A.B. (Bowdoin), A.M., Ph.D. (Harvard), L.H.D. (Bowdoin). Elected Overseer, 1966; elected Trustee, 1975; elected emeritus, 1982.

Leland Matthew Goodrich, A.B. (Bowdoin), A.M., Ph.D. (Harvard), Sc.D. (Bowdoin), LL.D. (Columbia). Elected Overseer, 1961; elected Trustee, 1966; elected emeritus, 1975.

Roger Howell, Jr., A.B. (Bowdoin), B.A., M.A., D.Phil. (Oxford), LL.D. (Nasson, Colby), L.H.D. (Maine), Litt.D. (Bowdoin). President of the College, 1969-1978; elected emeritus, 1978.

William Butler Mills, A.B. (Bowdoin), LL.B. (George Washington), A.M. (Syracuse), LL.D. (Bowdoin), L.H.D. (Jacksonville). Elected Overseer, 1965; elected Trustee, 1975; elected emeritus, 1982.

Jotham Donnell Pierce, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1963; elected Trustee, 1976; elected emeritus, 1984.

William Curtis Pierce, A.B. (Bowdoin), LL.B. (Harvard), LL.D. (Bowdoin). Elected Overseer, 1962; elected Trustee, 1967; elected emeritus, 1981.

Benjamin Robert Shute, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1953; elected Trustee, 1959; elected emeritus, 1977.

Vincent Bogan Welch, A.B. (Bowdoin), J.D. (Harvard), LL.D. (Bowdoin). Elected Overseer, 1962; elected Trustee, 1972; elected emeritus, 1980.

Peter Charles Barnard, A.B. (Bowdoin), A.M. (Middlebury), Secretary. Elected 1977.

THE BOARD OF OVERSEERS

Robert Chamberlain Porter, A.B. (Bowdoin), LL.B. (Pennsylvania), President. Elected Overseer, 1975. Term expires 1987.

Norman Paul Cohen, A.B. (Bowdoin), J.D. (Harvard), Vice President.
Elected Overseer, 1977. Term expires 1989.

Richard Kenneth Barksdale, A.B. (Bowdoin), A.M. (Syracuse), A.M., Ph.D. (Harvard), L.H.D. (Bowdoin). Elected Overseer, 1974. Term expires 1986.

Peter Charles Barnard, A.B. (Bowdoin), A.M. (Middlebury), Secretary of the President and Trustees, ex officio.

Matthew Davidson Branche, A.B. (Bowdoin), M.D. (Boston University). Elected Overseer, 1970. Term expires 1985.

Theodore Hamilton Brodie, A.B. (Bowdoin). Elected Overseer, 1983. First term expires 1989.

William Smith Burton, B.S. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1971. Term expires 1986.

John Everett Cartland, Jr., A.B. (Bowdoin), M.D. (Columbia). Elected Overseer, 1976. Term expires 1988.

Honorable William Sebastian Cohen, A.B. (Bowdoin), LL.B. (Boston University), LL.D. (St. Joseph, Maine, Western New England, Bowdoin, Nasson). Elected Overseer, 1973. Term expires 1985.

Oliver Farrar Emerson II, A.B. (Bowdoin). Elected Overseer, 1974. Term expires 1986.

William Francis Farley, A.B. (Bowdoin), J.D. (Boston College). Elected Overseer, 1980. First term expires 1986.

Robert Mason Farquharson, A.B. (Bowdoin), J.D. (Chicago). Elected Overseer, 1983. First term expires 1989.

Frank John Farrington, A.B. (Bowdoin). Elected Overseer, 1984. First term expires 1990.

Honorable Joseph Lyman Fisher, B.S. (Bowdoin), A.M., Ph.D. (Harvard), Sc.D. (Bowdoin), LL.D. (Allegheny), L.H.D. (Starr King School of Ministry). Elected Overseer, 1970. Term expires 1985.

Herbert Spencer French, Jr., A.B. (Bowdoin), M.B.A. (Pennsylvania). Elected Overseer, 1976. Term expires 1988.

Paul Edward Gardent, Jr., B.S. (Bowdoin). Elected Overseer, 1975. Term expires 1987.

Albert Edward Gibbons, Jr., A.B. (Bowdoin). Elected Overseer, 1973. Term expires 1985.

- Leon Arthur Gorman**, A.B., LL.D. (Bowdoin). Elected Overseer, 1983. First term expires 1989.
- Arthur LeRoy Greason**, A.B. (Wesleyan), A.M., Ph.D. (Harvard), President of the College, *ex officio*.
- Jonathan Standish Green**, A.B. (Bowdoin), M.B.A. (California). Elected Overseer, 1975. Term expires 1987.
- William Harris Hazen**, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1981. First term expires 1987.
- Caroline Lee Herter**. Elected Overseer, 1976. Term expires 1988.
- Regina Elbinger Herzlinger**, B.S. (Massachusetts Institute of Technology), D.B.A. (Harvard). Elected Overseer, 1983. First term expires 1989.
- Reverend Judith Linnea Anderson Hoehler**, A.B. (Douglass), M.Div. (Harvard). Elected Overseer, 1980. First term expires 1986.
- Dennis James Hutchinson**, A.B. (Bowdoin), M.A. (Oxford), LL.M. (Texas, Austin). Elected Overseer, 1975. Term expires 1987.
- William Dunning Ireland, Jr.**, A.B. (Bowdoin). Elected Overseer, 1971. Term expires 1986.
- Judith Magyar Isaacson**, A.B. (Bates), A.M. (Bowdoin). Elected Overseer, 1984. First term expires 1990.
- Donald Richardson Kurtz**, A.B. (Bowdoin), M.B.A. (Stanford). Elected Overseer, 1984. First term expires 1990.
- Albert Frederick Lilley**, A.B. (Bowdoin), LL.B. (Virginia). Elected Overseer, 1976. Term expires 1988.
- Herbert Mayhew Lord**, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1980. First term expires 1986.
- Malcolm Elmer Morrell, Jr.**, A.B. (Bowdoin), LL.B. (Boston University). Elected Overseer, 1974. Term expires 1986.
- Richard Allen Morrell**, A.B. (Bowdoin). Elected Overseer, 1979. First term expires 1985.
- Robert Warren Morse**, B.S. (Bowdoin), M.S., Ph.D. (Brown), Sc.D. (Bowdoin). Elected Overseer, 1971. Term expires 1986.
- Norman Colman Nicholson, Jr.**, A.B. (Bowdoin). Elected Overseer, 1979. First term expires 1985.
- John Thorne Perkin**, A.B. (Bowdoin). Elected Overseer, 1973. Term expires 1985.

Payson Stephen Perkins, A.B. (Bowdoin). Elected Overseer, 1980. First term expires 1986.

Louis Robert Porteous, Jr., A.B. (Bowdoin), LL.D. (Portland School of Art). Elected Overseer, 1982. First term expires 1988.

Jean Sampson, A.B. (Smith). Elected Overseer, 1976. Term expires 1988.

Carolyn Walch Slayman, A.B. (Swarthmore), Ph.D. (Rockefeller). Elected Overseer, 1976. Term expires 1988.

Terry Douglas Stenberg, A.B. (Bowdoin), Ed.M. (Boston University), Ph.D. (Minnesota). Elected Overseer, 1983. First term expires 1989.

Deborah Jean Swiss, A.B. (Bowdoin), Ed.M., Ed.D. (Harvard). Elected Overseer, 1983. First term expires 1989.

Raymond Stanley Troubh, A.B. (Bowdoin), LL.B. (Yale). Elected Overseer, 1978. Term expires 1990.

William David Verrill, A.B. (Bowdoin). Elected Overseer, 1980. First term expires 1986.

OVERSEERS EMERITI

Charles William Allen, A.B. (Bowdoin), J.D. (Michigan), LL.D. (Bowdoin). Elected Overseer, 1967; elected emeritus, 1976.

Neal Woodside Allen, Jr., A.B. (Bowdoin), A.M., Ph.D. (Harvard). Elected Overseer, 1972; elected emeritus, 1984.

Willard Bailey Arnold III, A.B. (Bowdoin), M.S. (New York University). Elected Overseer, 1970; elected emeritus, 1984.

Charles Manson Barbour, A.B. (Bowdoin), M.D., C.M. (McGill). Elected Overseer, 1960; elected emeritus, 1977.

Robert Ness Bass, A.B. (Bowdoin), M.B.A. (Harvard). Elected Overseer, 1964; elected emeritus, 1980.

Louis Bernstein, A.B., LL.D. (Bowdoin). Elected Overseer, 1958; elected emeritus, 1973.

Gerald Walter Blakeley, Jr., A.B. (Bowdoin). Elected Overseer, 1960; elected emeritus, 1976.

Reverend Richard Hill Downes, A.B. (Bowdoin), S.T.B. (General Theological Seminary). Elected Overseer, 1970; elected emeritus, 1983.

Roy Anderson Foulke, B.S., A.M., LL.D. (Bowdoin). Elected Overseer, 1948; elected emeritus, 1973.

Nathan Ira Greene, A.B. (Bowdoin). Elected Overseer, 1964; elected emeritus, 1980.

Peter Francis Hayes, A.B. (Bowdoin), B.A., M.A. (Oxford), A.M., M.Phil., Ph.D. (Yale). Elected Overseer, 1969; elected emeritus, 1983.

Honorable Horace Augustine Hildreth, A.B. (Bowdoin), LL.B. (Harvard), Ed.D. (Suffolk, Boston University, Temple), D.C.L. (Peshawar University, Pakistan), LL.D. (Maine, Bowdoin). Elected Overseer, 1953; elected emeritus, 1974.

Lewis Wertheimer Kresch, A.B. (Bowdoin), M.B.A. (Harvard). Elected Overseer, 1970; elected emeritus, 1983.

William Howard Niblock, B.S. (Bowdoin), A.M., Ed.M. (Harvard), L.H.D. (Nasson, Bowdoin). Elected Overseer, 1958; elected emeritus, 1975.

Ezra Pike Rounds, A.B. (Bowdoin). Elected Overseer, 1952; elected emeritus, 1974.

Alden Hart Sawyer, B.S., LL.D. (Bowdoin). Elected Overseer, 1954; elected Treasurer, 1967; elected emeritus, 1979.

Robert Nelson Smith, Lieutenant General (Ret.), B.S. (Bowdoin), LL.D. (Kyung Hee University, Korea). Elected Overseer, 1965; elected emeritus, 1978.

Lewis Vassor Vafiades, A.B. (Bowdoin), LL.B. (Boston University). Elected Overseer, 1973; elected emeritus, 1979.

Honorable Donald Wedgwood Webber, A.B. (Bowdoin), LL.B. (Harvard), L.H.D. (Bates, Defiance), LL.D. (Bowdoin, Maine). Elected Overseer, 1962; elected emeritus, 1979.

George Curtis Webber II, A.B. (Bowdoin), Secretary. Elected Secretary, 1983.

COMMITTEES OF THE BOARDS

Joint Standing Committees*

Academic Affairs: John F. Magee, *Chairman*; Theodore H. Brodie, Leonard W. Cronkhite, Jr., Leon A. Gorman, Merton G. Henry, Judith L. Hoehler, Judith M. Isaacson, Robert W. Morse, Carolyn W. Slayman; Professor Nyhus and one representative from the Committee on Curriculum and Educational Policy; two undergraduates and one alternate.

* The President of the College is ex officio a member of all standing committees except the Audit Committee.

Audit: Winthrop B. Walker, *Chairman*; Jonathan S. Green, Regina E. Herzlinger.

Development: William H. Hazen, *Chairman*; Rosalyne S. Bernstein, William P. Drake, Oliver F. Emerson II, Robert M. Farquharson, Herbert M. Lord, John T. Perkin, L. Robert Porteous, Jr., Richard A. Wiley; Professors Kertzer and Mayo; two undergraduates and two alternates.

Executive: Everett P. Pope, Chairman of the President and Trustees; A. LeRoy Greason, President of the College; Robert C. Porter, President of the Overseers; Chairmen Bernstein (Financial Planning); Hazen (Development); Herter (Student Affairs); Magee (Academic Affairs); Thorne (Investments); Verrill (Physical Plant); Professor McEwen; Laurie A. Hawkes '77, President of the Alumni Council; one undergraduate.

Financial Planning: Rosalyne S. Bernstein, *Chairman*; Dennis J. Hutchinson, *Vice-Chairman*; John R. Hupper, Albert F. Lilley, Malcolm E. Morrell, Jr., Richard A. Morrell, Norman C. Nicholson, Jr., Jean Sampson; Professor Shipman and one representative from the Committee on Budgetary Priorities; one representative from the Alumni Council; two undergraduates and two alternates.

Honors: Robert C. Porter, *Chairman*; Richard K. Barksdale, William S. Burton, William P. Drake, Merton G. Henry, John F. Magee, Carolyn W. Slayman; Professor Howland; one undergraduate and one alternate.

Investments: Frederick G. P. Thorne, *Chairman*; Paul P. Brountas, William F. Farley, Paul E. Gardent, Jr., Roscoe C. Ingalls, Jr., William D. Ireland, Jr., Donald R. Kurtz, Norman C. Nicholson, Jr., Raymond S. Troubh; Professor Shipman; one representative from the Alumni Council; one undergraduate and one alternate.

Nominating: Robert M. Farquharson, *Chairman*; Paul P. Brountas, Merton G. Henry, Judith L. Hoehler, Deborah J. Swiss; Professor Whiteside, Laurie A. Hawkes '77, President of the Alumni Council; one undergraduate and one alternate.

Physical Plant: W. David Verrill, *Chairman*; Leonard W. Cronkhite, Jr., Frank J. Farrington, Herbert S. French, Jr., Albert E. Gibbons, Jr., Roscoe C. Ingalls, Jr., Payson S. Perkins, Jean Sampson, Winthrop B. Walker; Professor Barker and Director of Theater Rutan; two undergraduates.

Student Affairs: C. Lee Herter, *Chairman*; Matthew D. Branche, John E. Cartland, Jr., John R. Hupper, Herbert M. Lord, T. Douglas Stenberg, Deborah J. Swiss, Frederick G. P. Thorne, Richard A. Wiley; Professors Ambrose and Bolles; two undergraduates and one alternate.

FACULTY REPRESENTATIVES

Professor McEwen (1985), Professor Shipman (1986), and Professor White-side (1987).

STUDENT REPRESENTATIVES

Trustees: Laurie Ann Lutender '85, the Chairman of the Student Executive Board; Mary F. Wilcox '85, alternate.

Overseers: Jennifer B. Wallace-Brodeur '85, Carter A. Welch '86, and Vice Chairman of Student Executive Board; Robert R. Forsberg, Jr. '85, alternate.

ALUMNI COUNCIL REPRESENTATIVES

Executive Committee: Laurie A. Hawkes '77.

Trustees: Two representatives to be appointed.

Overseers: Two representatives to be appointed.

Officers of Instruction

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), President of the College and Professor of English. (1952)*

Albert Abrahamson, A.B. (Bowdoin), A.M. (Columbia), Sc.D. (Bowdoin), George Lincoln Skolfield, Jr., Professor of Economics Emeritus. (1928)

Philip Conway Beam, A.B., A.M., Ph.D. (Harvard), Henry Johnson Professor of Art and Archaeology Emeritus. (1936)

Kenneth James Boyer, A.B. (Rochester), B.L.S. (New York State Library School), College Editor Emeritus. (1927)

Herbert Ross Brown, B.S. (Lafayette), A.M. (Harvard), Ph.D. (Columbia), Litt.D. (Lafayette, Bowdoin), L.H.D. (Bucknell), LL.D. (Maine), Professor of English and Edward Little Professor of Rhetoric and Oratory Emeritus. (1925)

Philip Meader Brown, A.B. (Brown), A.M. (Stanford), Ph.D. (Harvard), Professor of Economics Emeritus. (1934)

James Stacy Coles, B.S. (Mansfield), A.B., A.M., Ph.D. (Columbia), D.Sc. (New Brunswick), LL.D. (Brown, Maine, Colby, Columbia, Middlebury, Bowdoin), Sc.D. (Merrimack), President of the College Emeritus. (1952)

Edmund Lawrence Coombs, A.B. (Bowdoin), Director of Athletics Emeritus. (1947)

Louis Osborne Cox, A.B. (Princeton), Pierce Professor of English Emeritus. (1955)

Paul Gifford Darling, A.B. (Yale), A.M. (New York University), Ph.D. (Columbia), Professor of Economics Emeritus. (1956)

Alton Herman Gustafson, B.S. (Massachusetts), A.M., Ph.D. (Harvard), Professor of Biology Emeritus. (1946)

Daniel Francis Hanley, A.B. (Bowdoin), M.D. (Columbia), Sc.D. (Bowdoin), College Physician Emeritus. (1946)

Ernst Christian Helmreich, A.B. (Illinois), A.M., Ph.D. (Harvard), Thomas Brackett Reed Professor of History and Political Science Emeritus. (1931)

* Date of first appointment to the faculty.

Cecil Thomas Holmes, A.B. (Bates), A.M., Ph.D. (Harvard), Wing Professor of Mathematics Emeritus. (1925)

Myron Alton Jeppesen, B.S. (Idaho), M.S., Ph.D. (Pennsylvania State), Professor of Physics and Josiah Little Professor of Natural Science Emeritus. (1936)

Helen Buffum Johnson, Registrar Emerita. (1943)

Samuel Edward Kamerling, B.S., M.S. (New York University), Ph.D. (Princeton), Charles Weston Pickard Professor of Chemistry Emeritus. (1934)

Fritz Carl August Koelln, Ph.D. (Hamburg), Professor of German and George Taylor Files Professor of Modern Languages Emeritus. (1929)

Samuel Appleton Ladd, Jr., B.S. (Bowdoin), Director of Career Counseling and Placement Emeritus. (1944)

Donovan Dean Lancaster, A.B. (Bowdoin), Director of the Moulton Union and the Centralized Dining Service Emeritus. (1927)

Eaton Leith, A.B. (Dartmouth), A.M. (Harvard), Professor of Romance Languages Emeritus. (1936)

Edith Ellen Lyon, Assistant to the College Editor Emerita. (1922)

James Malcolm Moulton, B.S. (Massachusetts), A.M., Ph.D. (Harvard), George Lincoln Skolfield, Jr., Professor of Biology Emeritus. (1952)

Matilda White Riley, A.B., A.M. (Radcliffe), Sc.D. (Bowdoin), Daniel B. Fayerweather Professor of Political Economy and Sociology Emerita. (1973)

Thomas Auraldo Riley, A.B. (Bowdoin), A.M. (Yale), Ph.D. (Harvard), Professor of German Emeritus. (1939)

Geoffrey Robert Stanwood, B.S. (Bowdoin), Assistant to the President Emeritus. (1972)

Kathryn Drusilla Fielding Stemper, A.B. (Connecticut College), Secretary to the President Emerita. (1957)

Albert Rudolph Thayer, A.B. (Bowdoin), A.M. (Emerson), Harrison King McCann Professor of Oral Communication in the Department of English Emeritus. (1924)

John William Ambrose, Jr., A.B., A.M., Ph.D. (Brown), Joseph Edward Merrill Professor of Greek Language and Literature. (1966)

- William Henry Barker**, A.B. (Harpur College), Ph.D. (Massachusetts Institute of Technology), Associate Professor of Mathematics. (1975)
- Robert Kingdon Beckwith**, B.S. (Lehigh), M.S. (Juilliard), Professor of Music. (1953)
- Thomas Oliver Beebee**, A.B. (Dartmouth), A.M., Ph.D. (Michigan), Assistant Professor of German. (1984)
- Susan Elizabeth Bell**, A.B. (Haverford), A.M., Ph.D. (Brandeis), Assistant Professor of Sociology. (1983)
- Joseph T. Bennett**, B.S. (Michigan State), M.S., Ph.D. (Washington), Assistant Professor of Chemistry. (1983)
- Ray Stuart Bicknell**, B.S., M.S. (Springfield), Coach in the Department of Athletics. (1962)
- Augusta Lynn Bolles**, A.B. (Syracuse), M.A., Ph.D. (Rutgers), Assistant Professor of Anthropology and Director of the Afro-American Studies Program. (1980)
- Barbara Weiden Boyd**, B.A. (Manhattanville), M.A., Ph.D. (Michigan), Assistant Professor of Classics. (1980)
- Gabriel John Brogyanyi**, A.B. (Columbia), A.M., Ph.D. (Cornell), Associate Professor of Romance Languages. (1968)
- Franklin Gorham Burroughs, Jr.**, A.B. (University of the South), A.M., Ph.D. (Harvard), Associate Professor of English. (On leave of absence in the spring semester.) (1968)
- Samuel Shipp Butcher**, A.B. (Albion), A.M., Ph.D. (Harvard), Professor of Chemistry. (On leave of absence.) (1964)
- Charles Joseph Butt**, B.S., M.S. (Springfield), Coach in the Department of Athletics and Director of the Curtis Pool. (1961)
- Helen Louise Cafferty**, A.B. (Bowling Green), A.M. (Syracuse), Ph.D. (Michigan), Associate Professor of German. (1972)
- Steven Roy Cerf**, A.B. (Queens College), M.Ph., Ph.D. (Yale), Associate Professor of German. (On leave of absence.) (1971)
- Richard Leigh Chittim**, A.B. (Bowdoin), B.A., M.A. (Oxford), Wing Professor of Mathematics. (1942)
- Ronald L. Christensen**, A.B. (Oberlin), A.M., Ph.D. (Harvard), Associate Professor of Chemistry. (1976)

- Dorothy Patricia Coleman**, A.B., A.M. (Northern Illinois), Ph.D. (Pennsylvania), Assistant Professor of Philosophy. (1984)
- Denis Joseph Corish**, B.Ph., B.A., L.Ph. (Maynooth College, Ireland), A.M. (University College, Dublin), Ph.D. (Boston University), Associate Professor of Philosophy. (1973)
- Thomas Browne Cornell**, A.B. (Amherst), Professor of Art. (On leave of absence in the fall semester.) (1962)
- Michael Richard Corson**, A.B. (Bowdoin), Ph.D. (Boston University), Assistant Professor of Physics. (1980)
- Herbert Randolph Coursen, Jr.**, A.B. (Amherst), A.M. (Wesleyan), Ph.D. (Connecticut), Professor of English. (On leave of absence in the fall semester.) (1964)
- Myron Whipple Curtis**, A.B. (Bowdoin), A.M. (California, Los Angeles), Director of the Computing Center and Lecturer in Mathematics. (1965)
- Judith M. Dean**, A.B. (Gordon), A.M. (Cornell), Instructor in Economics. (1983)
- Eugenia Caroline DeLamotte**, A.B. (Duke), B.A., M.A. (Oxford), A.M., Ph.D. (Harvard), Assistant Professor of English. (On leave of absence in the spring semester.) (1982)
- Patsy S. Dickinson**, A.B. (Pomona), M.S., Ph.D. (Washington), Assistant Professor of Biology. (1983)
- Kevin Michael Donahue**, A.B. (Richmond), M.F.A. (Brooklyn), Visiting Assistant Professor of Art. (1982)
- John Chauncey Donovan**, A.B. (Bates), A.M., Ph.D. (Harvard), DeAlva Stanwood Alexander Professor of Government. (1965)
- Stephen Thomas Fisk**, A.B. (California, Berkeley), A.M., Ph.D. (Harvard), Associate Professor of Mathematics. (1977)
- John M. Fitzgerald**, A.B. (Montana), M.S., Ph.D. (Wisconsin), Assistant Professor of Economics. (1983)
- Liliane P. Floge**, A.B. (City College of New York), M. Phil., Ph.D. (Columbia), Assistant Professor of Sociology. (On leave of absence.) (1980)
- Albert Myrick Freeman III**, A.B. (Cornell), A.M., Ph.D. (University of Washington), Professor of Economics and Director of the Environmental Studies Program. (1965)
- Alain David Fresco**, A.B. (Delaware), Ph.D. (Indiana), Assistant Professor of Romance Languages. (1981)

- Karen Louise Fresco, A.B. (Carleton), Ph.D. (Indiana), Assistant Professor of Romance Languages. (1983)
- Alfred Herman Fuchs, A.B. (Rutgers), A.M. (Ohio), Ph.D. (Ohio State), Dean of the Faculty and Professor of Psychology. (1962)
- William Davidson Geoghegan, A.B. (Yale), M.Div. (Drew), Ph.D. (Columbia), Professor of Religion. (1954)
- Norman E. Gibbs, B.S. (Ursinus), M.S., Ph.D. (Purdue), Professor of Computer Science and Information Studies. (1983)
- Jonathan Paul Goldstein, A.B. (New York, Buffalo), A.M., Ph.D. (Massachusetts), Assistant Professor of Economics. (1979)
- Peter Thomas Gottschalk, A.B., A.M. (George Washington), Ph.D. (Pennsylvania), Associate Professor of Economics. (On leave of absence.) (1977)
- Robert Kim Greenlee, B.M., M.M. (Oklahoma), Instructor in Music. (1982)
- Kathy L. Greenwood, A.B., A.M. (New Mexico), Ph.D. (Ohio State), Assistant Professor of English. (1982)
- Robert John Griffin, A.B. (Tel Aviv), A.M., M.Phil. (Yale), Instructor in English. (1983)
- Charles Alfred Grobe, Jr., B.S., M.S., Ph.D. (Michigan), Professor of Mathematics. (1964)
- Gerard Haggerty, A.B., M.F.A. (California, Santa Barbara), Assistant Professor of Art. (1978)
- Lawrence Sargent Hall, A.B. (Bowdoin), A.M., Ph.D. (Yale), Henry Leland Chapman Professor of English Literature. (1946)
- Adrian C. Hayes, B. Sc., M.A. (Leicester University), Ph.D. (Brown), Visiting Assistant Professor of Sociology. (1984)
- Paul Vernon Hazelton, B.S. (Bowdoin), Ed.M. (Harvard), Professor of Education. (On leave of absence in the fall semester.) (1948)
- Barbara S. Held, A.B. (Douglass), Ph.D. (Nebraska), Assistant Professor of Psychology. (1979)
- James Lee Hodge, A.B. (Tufts), A.M., Ph.D. (Pennsylvania State), George Taylor Files Professor of Modern Languages. (1961)
- John Clifford Holt, A.B. (Gustavus Adolphus), A.M. (Graduate Theological Union), Ph.D. (Chicago), Associate Professor of Religion. (On leave of absence.) (1978)

- Roger Howell, Jr.**, A.B. (Bowdoin), B.A., M.A., D.Phil. (Oxford), LL.D. (Nasson, Colby), L.H.D. (Maine), Litt.D. (Bowdoin), Professor of History. (1964)
- John LaFollette Howland**, A.B. (Bowdoin), Ph.D. (Harvard), Josiah Little Professor of Natural Science and Professor of Biology and Biochemistry. (1963)
- William Taylor Hughes**, B.S., A.M. (Indiana), Ph.D. (Northwestern), Professor of Physics and Astronomy. (1966)
- Marya Hunsinger**, A.B. (Colorado College), A.M. (Wisconsin), Instructor in Romance Languages. (1983)
- Charles Ellsworth Huntington**, A.B., Ph.D. (Yale), Professor of Biology. (On leave of absence in the fall semester.) (1953)
- Eugene Huskey**, A.B. (Vanderbilt), A.M. (University of Essex), Ph.D. (London School of Economics and Political Science), Assistant Professor of Government. (1983)
- Arthur Mekeel Hussey II**, B.S. (Pennsylvania State), Ph.D. (Illinois), Professor of Geology. (1961)
- Roberta T. Jacobs**, A.B. (Rutgers), A.M. (Columbia), Ph.D. (Cornell), Lecturer in History. (On leave of absence in the spring semester.)
- Nancy S. Johnson**, A.B. (Kansas), Ph.D. (California, San Diego), Assistant Professor of Psychology. (1984)
- Robert Wells Johnson**, A.B. (Amherst), M.S., Ph.D. (Massachusetts Institute of Technology), Professor of Mathematics. (On leave of absence in the spring semester.) (1964)
- Kristine L. Jones**, A.B. (Prescott), A.M., Ph.D. (Chicago), Assistant Professor of History. (1984)
- John Michael Karl**, A.B., A.M., Ph.D. (Harvard), Associate Professor of History. (1968)
- Barbara Jeanne Kaster**, A.B. (Texas Western), M.Ed. (Texas, El Paso), Ph.D. (Texas, Austin), Harrison King McCann Professor of Oral Communication in the Department of English. (1973)
- David Israel Kertzer**, A.B. (Brown), Ph.D. (Brandeis), Professor of Anthropology. (1973)
- Qaiser M. Khan**, A.B. (Colby), A.M., A.M., Ph.D. (Pennsylvania), Assistant Professor of Economics. (1983)

- Jane Elizabeth Knox, A.B. (Wheaton), A.M. (Michigan State), Ph.D. (Texas, Austin), Associate Professor of Russian. (1976)
- Elroy Osborne LaCasce, Jr., A.B. (Bowdoin), A.M. (Harvard), Ph.D. (Brown), Professor of Physics. (1947)
- Mortimer Ferris LaPointe, B.S. (Trinity), M.A./L.S. (Wesleyan), Coach in the Department of Athletics. (1969)
- Sally Smith LaPointe, B.S. Ed. (Southern Maine), Coach in the Department of Athletics. (1973)
- James Spencer Lentz, A.B. (Gettysburg), A.M. (Columbia), Coach in the Department of Athletics. (1968)
- Daniel Levine, A.B. (Antioch), A.M., Ph.D. (Northwestern), Thomas Brackett Reed Professor of History and Political Science. (On leave of absence in spring semester.) (1963)
- Mike Linkovich, A.B. (Davis and Elkins), Trainer in the Department of Athletics. (1954)
- Joseph David Litvak, A.B. (Wesleyan), M.Phil., Ph.D. (Yale), Assistant Professor of English. (1982)
- Burke O'Connor Long, A.B. (Randolph-Macon), B.D., A.M., Ph.D. (Yale), Professor of Religion. (1968)
- Larry D. Lutchmansingh, A.B. (McGill), A.M. (Chicago), Ph.D. (Cornell), Associate Professor of Art. (1974)
- Dana Walker Mayo, B.S. (Massachusetts Institute of Technology), Ph.D. (Indiana), Charles Weston Pickard Professor of Chemistry. (1962)
- Jeanne D'Arc Mayo, B.S., M.Ed. (Boston University), Associate Trainer and Physical Therapist. (1978)
- David William McConnell, A.B. (Colorado College), A.M. (Wisconsin, Madison), Instructor in Government. (1982)
- Craig Arnold McEwen, A.B. (Oberlin), A.M., Ph.D. (Harvard), Associate Professor of Sociology. (1975)
- Charles Douglas McGee, B.S., A.M. (Northwestern), Ph.D. (Harvard), Professor of Philosophy. (1963)
- John McKee, A.B. (Dartmouth), A.M. (Princeton), Lecturer in Art. (1969)
- Sarah Francis McMahon, A.B. (Wellesley), Ph.D. (Brandeis), Assistant Professor of History. (1982)

- Terry A. Meagher**, A.B. (Boston University), M.S. (Illinois State), Coach in the Department of Athletics. (1983)
- Raymond H. Miller**, A.B. (Indiana), A.M., Ph.D. (Harvard), Assistant Professor of Russian. (1983)
- Richard Ernest Morgan**, A.B. (Bowdoin), A.M., Ph.D. (Columbia), William Nelson Cromwell Professor of Constitutional and International Law and Government. (1969)
- Nalin Timoleon Mukherjee**, A.B. (California, Los Angeles), A.M., Ph.D. (Harvard), Assistant Professor of Music. (1982)
- Jeffrey Karl Nagle**, B.A. (Earlham), Ph.D. (University of North Carolina), Assistant Professor of Chemistry. (1980)
- David S. Newbury**, A.B. (Williams), Dip.Ed. (Makerere University), A.M., Ph.D. (Wisconsin, Madison), Visiting Assistant Professor of History. (1984)
- Erik Otto Nielsen**, A.B., A.M. (New York, Buffalo), Ph.D. (Bryn Mawr), Associate Professor of Archaeology in the Department of Classics. (1974)
- Robert Raymond Nunn**, A.B. (Rutgers), A.M. (Middlebury), Ph.D. (Columbia), Associate Professor of Romance Languages. (1959)
- Paul Luther Nyhus**, A.B. (Augsburg), S.T.B., Ph.D. (Harvard), Professor of History. (1966)
- Clifton Cooper Olds**, A.B. (Dartmouth), A.M., Ph.D. (Pennsylvania), Edith Cleaves Barry Professor of the History and Criticism of Art. (1982)
- Michael King Ong**, A.B. (University of the Philippines), A.M., M.S., Ph.D. (New York, Stony Brook), Assistant Professor of Mathematics. (1984)
- David Sanborn Page**, B.S. (Brown), Ph.D. (Purdue), Professor of Chemistry and Biochemistry. (1974)
- Edward Pols**, A.B., A.M., Ph.D. (Harvard), Research Professor of Philosophy and the Humanities. (1949)
- Christian Peter Potholm II**, A.B. (Bowdoin), A.M., M.A.L.D., Ph.D. (Tufts), Professor of Government. (On leave of absence in the spring semester.) (1970)
- James Daniel Redwine, Jr.**, A.B. (Duke), A.M. (Columbia), Ph.D. (Princeton), Edward Little Professor of the English Language and Literature. (1963)
- Edward Thomas Reid**, Coach in the Department of Athletics. (1969)

- Marilyn Reizbaum**, A.B. (Queens College), M. Litt. (University of Edinburgh), Instructor in English. (1984)
- Charlotte Albright Renner**, A.B. (Bennington), A.M., Ph.D. (Boston University), Visiting Assistant Professor of English. (Spring 1985)
- John Cornelius Rensenbrink**, A.B. (Calvin), A.M. (Michigan), Ph.D. (Chicago), Professor of Government. (1961)
- Rosemary A. Roberts**, B.A. (University of Reading), M. Sc., Ph.D. (University of Waterloo), Assistant Professor of Mathematics. (1984)
- Guenter Herbert Rose**, B.S. (Tufts), M.S. (Brown), Ph.D. (California, Los Angeles), Associate Professor of Psychology. (1976)
- Daniel Walter Rossides**, A.B., Ph.D. (Columbia), Professor of Sociology. (1968)
- Burton Rubin**, A.B. (New York University), A.M. (Columbia), Associate Professor of Russian. (On leave of absence.) (1965)
- Lynn Margaret Ruddy**, B.S. (Wisconsin, Oshkosh), Coach in the Department of Athletics. (1976)
- Abram Raymond Rutan**, A.B. (Bowdoin), M.F.A. (Yale), Director of Theater in the Department of English. (1955)
- Paul Eugene Schaffner**, A.B. (Oberlin), Ph.D. (Cornell), Assistant Professor of Psychology. (1977)
- Elliott Shelling Schwartz**, A.B., A.M., Ed.D. (Columbia), Professor of Music. (1964)
- Carl Thomas Settemire**, B.S., M.S. (Ohio State), Ph.D. (North Carolina State), Associate Professor of Biology and Chemistry. (1969)
- Harvey Paul Shapiro**, B.S. (Connecticut), M.Ed. (Springfield), Coach in the Department of Athletics. (1983)
- William Davis Shipman**, A.B. (University of Washington), A.M. (California, Berkeley), Ph.D. (Columbia), Adams-Catlin Professor of Economics. (1957)
- Melinda Yowell Small**, B.S., A.M. (St. Lawrence), Ph.D. (Iowa), Associate Professor of Psychology. (1972)
- Kidder Smith**, A.B. (Princeton), Ph.D. (California, Berkeley), Assistant Professor of History. (1981)

Philip Hilton Soule, A.B. (Maine), Coach in the Department of Athletics. (1967)

Allen Lawrence Springer, A.B. (Amherst), A.M., M.A.L.D., Ph.D. (Tufts), Assistant Professor of Government. (1976)

Randolph Stakeman, A.B. (Wesleyan), A.M., Ph.D. (Stanford), Assistant Professor of History. (On leave of absence.) (1978)

William Lee Steinhart, A.B. (Pennsylvania), Ph.D. (Johns Hopkins), Associate Professor of Biology. (1975)

Clifford Ray Thompson, Jr., A.B., A.M., Ph.D. (Harvard), Professor of Romance Languages. (1961)

James Henry Turner, A.B. (Bowdoin), B.S., M.S., Ph.D. (Massachusetts Institute of Technology), Associate Professor of Physics. (1964)

John Harold Turner, M.A. (St. Andrews, Scotland), A.M. (Indiana), Ph.D. (Harvard), Professor of Romance Languages. (1971)

David Jeremiah Vail, A.B. (Princeton), A.M., M.Phil., Ph.D. (Yale), Professor of Economics. (1970)

Howard S. Vandersea, A.B. (Bates), M.Ed. (Boston University), Coach in the Department of Athletics. (1984)

William Chace VanderWolk, A.B. (North Carolina), A.M. (Middlebury), Instructor in Romance Languages. (1984)

Joanne P. Waghorne, A.B. (Wilson), A.M., Ph.D. (Chicago), Visiting Assistant Professor of Religion. (1983)

James Edward Ward III, A.B. (Vanderbilt), A.M., Ph.D. (Virginia), Professor of Mathematics. (1968)

Sidney John Watson, B.S. (Northeastern), Director of Athletics. (1958)

William Collins Watterson, A.B. (Kenyon), Ph.D. (Brown), Associate Professor of English. (1976)

Susan Elizabeth Wegner, A.B. (Wisconsin, Madison), A.M., Ph.D. (Bryn Mawr), Assistant Professor of Art History. (On leave of absence in the spring semester.) (1980)

William Bolling Whiteside, A.B. (Amherst), A.M., Ph.D. (Harvard), Frank Munsey Professor of History. (1953)

Andrew M. Wolfe, B.A.S., B.S.E. (Pennsylvania), A.M. (Wisconsin), Instructor in Economics. (1983)

William E. Zamer, B.S. (Juniata), A.M. (William and Mary), Instructor in Biology. (1983)

COMMITTEES OF THE FACULTY

AARON WEISSMAN, *Faculty Clerk*

Administrative: The President, *Chairman*; the Dean of the College, the Dean of Students, the College Physician (all ex officio), Ms. Bolles, Mr. Nielsen, Ms. Ruddy, and Mr. Settlemire. Undergraduates: Sonya D. Dockett '85, John C. Frazer '87, and Carter A. Welch '86.

Admissions and Student Aid: Mr. John Turner, *Chairman*; the Dean of the College, the Dean of Students, the Director of Admissions (ex officio), the Director of Student Aid (ex officio), the Director of Athletics (ex officio), Mr. Barker, Ms. Boyd, Messrs. Griffin and Howland. Undergraduates: Michelle L. Keene '87, Anne-Marie McKenna '87 and Elyse Post '85. Alternate: Eric H. J. Stahlhut '87.

Afro-American Studies: Mr. Rensenbrink, *Chairman*; the Dean of Students, the Director of Afro-American Studies, Messrs. Fresco, Levine, Redwine, Rose, and Wolfe. Undergraduates: Barbara J. Geissler '85, William F. Mitchell '86, Henry T-A. Moniz '86 (ex officio), Reginald D. Reglus '87, and Patrick H. Smith '85.

Athletics: Mr. Kertzer, *Chairman*; the Dean of the College (ex officio), the Director of Athletics, Ms. Kaster, Messrs. Potholm and Schwartz. Undergraduates: Richard J. Boyages '85, Hugh J. Gorman III '85, and Thomas P. Welch '86.

Budgetary Priorities: Mr. Hodge (1986), *Chairman*; Messrs. Donovan (1987), Freeman (1985), and Litvak (1986), Ms. McMahon (1985), and Mr. Nagle (1986). Undergraduates: Christopher S. Babcock '86 (1986) and Peter L. Espo '86 (1986).

Committee on Committees: Mr. McEwen (1985), *Chairman*; the Dean of the Faculty (ex officio), Messrs. Burroughs (1986) and Corson (1985), Ms. McMahon (1987), Messrs. Springer (1985) and Steinhart (1987).

Computing Center: Mr. Fisk, *Chairman*; the Dean of the Faculty (ex officio), Mr. Curtis, *Secretary*; Messrs. Christensen, Gibbs (ex officio), Goldstein, and Mukherjee. Undergraduates: Christopher W. Parker '87 and Robert A. Parks '87.

Curriculum and Educational Policy: The President, *Chairman*; Mr. Redwine, *Secretary*; Messrs. Corson, Gibbs and Shipman, Ms. Small, and Mr. Smith. Undergraduates: John C. Frazer '87 and Adam S. Weinberg '87. Alternate: Gilbert C. Walker '84.

Environmental Studies: Mr. Steinhart, *Chairman*; Messrs. Freeman, Hussey, McKee, and Morgan. Undergraduates: Sarah S. Cary '85, Lisa M. Naglieri '87 and Peter A. Reed '84.

Faculty Affairs: Mr. Nyhus (1986), *Chairman*; the Dean of the Faculty (ex officio), Ms. Bell (1986), Ms. Cafferty (1985), Messrs. Christensen (1987), Johnson (1985) and Olds (1987), and Ms. Wegner (1985).

Faculty Research: The President, *Chairman*; the Dean of the Faculty (ex officio), Ms. Boyd (Surdna and Undergraduate Fellowships), Messrs. Fitzgerald (Koelln and Langbein Fellowships), Howell (Research Fund), Kertzer (Course Development), and Steinhart (Development Fund).

Fulbright Scholarship Subcommittee of the Committee on Graduate Scholarships: Mr. Howell, *Chairman*; Mr. Grobe and Ms. Waghorne.

Graduate Scholarships: The Dean of the College, *Chairman*; the Director of Student Aid, *Secretary*; Ms. Bolles, Mr. Brogyanyi, Ms. Dickinson, Messrs. Karl and James Turner.

Grievance (Sex): Mr. McEwen, *Chairman*; Ms. Cafferty, Mr. Corish, Ms. Dean, Mr. Mayo. Alternates: Ms. Dickinson and Mr. Wolfe.

Human and Animal Research: Mr. McGee, *Chairman*; the Dean of the Faculty, Ms. Bell, Messrs. Bennett, Huntington, Schaffner, and R. S. Youmans, D.V.M.

Lectures and Concerts: Ms. Held, *Chairman*; the Dean of the College (ex officio), Messrs. Greenlee, Howland, Huskey, Long, and Watterson. Undergraduates: James S. Kohn '85 and Elizabeth F. Schenck '87. Alternate: Lindsey R. Baden '87.

Library: Mr. Thompson, *Chairman*; the Librarian (ex officio), Ms. Dean, Messrs. Geoghegan, Rossides, and Zamer. Undergraduates: Sara L. Allen '87 and Gordon M. Weinberger '87.

Medical Scholarship Subcommittee of the Committee on Graduate Scholarships: The President, *Chairman*; the Dean of the College, the College Physician, Messrs. Moulton (ex officio) and Page.

Patent Policy: Mr. Mayo, *Chairman*; the Dean of the Faculty, Messrs. Beckwith and Hall.

Recording: The Dean of the College, *Chairman*; the Dean of Students, the Director of the Computing Center, Messrs. Ambrose, Vail, Ward, and Whiteside. Undergraduates: Sonya D. Dockett '85 and Lola E. Hogeman '87. Alternate: Karen E. McSweeney '87.

Rhodes Scholarship Subcommittee of the Committee on Graduate Scholarships: Mr. Howell, *Chairman*; Messrs. Chittim and McGee and Ms. Watson.

Studies in Education: Mr. Ward, *Chairman*; Messrs. Corish and Haggerty, Ms. Knox, and Mr. Long.

Student Activities Fee: Mr. Rensenbrink, *Chairman*; the Assistant Dean of Students, Messrs. Burroughs and Donahue. Undergraduates: William T. Evans III '87, David G. Fall '87, Laurie Lutender '85, Jonathan N. Rosen '87, and Tracy L. Wheeler '86.

Student Awards: Mr. LaCasce, *Chairman*; Mr. Karl, Ms. Kaster, Ms. McMahon, Mr. Nunn, and Ms. Watson.

Student Life: The Dean of Students, *Chairman*; the Director of the Moulton Union (ex officio), the Assistant Dean of Students (ex officio), the College Counselor; Ms. Knox, Messrs. McConnell, Page, Schaffner, and Watterson. Undergraduates: Donald B. Blanchon '86, John F. McManus '86, Jeffrey F. O'Sullivan '85, Elizabeth F. Schenck '87, and Paula M. Tremblay '87. Alternates: Adam S. Weinberg '87 and Caroline Y. Westort '86.

Upward Bound: Mr. Chittim, *Chairman*; Messrs. Hughes, Karl, Khan, and Rutan, Ms. Watson. Undergraduates: Sonya D. Dockett '85 and Tricia T. Lin '87.

Adjunct Faculty

- David James Butcher, B.S. (Vermont), Research Fellow in Chemistry.
- Karen Louise Butcher, B.S. (Vermont), Teaching Fellow in Chemistry.
- Pamela Jean Bryer, B.S., M.S. (Rensselaer Polytechnic Institute), Teaching Fellow in Biology.
- Paulette Messier Fickett, A.B. (Maine, Presque Isle), Teaching Fellow in Chemistry.
- Judith Cooley Foster, A.B. (Brown), A.M. (Rhode Island), Teaching Fellow in Chemistry.
- Alan Garfield, A.B. (New Hampshire), Teaching Fellow in Biology.
- Edward Smith Gilfillan III, A.B. (Yale), M.Sc., Ph.D. (British Columbia), Lecturer in Environmental Studies and Adjunct Professor of Chemistry.
- Clarence Lewis Grant, B.S., M.S. (New Hampshire), Ph.D. (Rutgers), Adjunct Professor of Chemistry.
- Janet Ruth Hotham, B.S. (Merrimack), Research Teaching Fellow in Chemistry.
- George Steven Isaacson, A.B. (Bowdoin), J.D. (Pennsylvania), Visiting Lecturer in Education. (Fall 1984)
- Manfred LaCassagnère, Teaching Fellow in French.
- Françoise Lafont, Teaching Fellow in French.
- Isabel Luengo Rodriquez, Teaching Fellow in Spanish.
- Sander J. H. Orent, B.S., M.D. (Michigan), Research Associate in Psychology.
- Rosa Pellegrini, Diploma Magistale (Istituto Magistrate "Imbriani" Avelino), Lecturer in Italian.
- Robert Franc Ritchie, M.D. (Rochester), Research Associate in Biology.
- David L. Roberts, A.B. (Bowdoin), Ph.D. (Case Western Reserve), Teaching Associate in Physics.
- Michael Paul Roderick, A.B. (Maine), Theater Technician.
- Leah G. Shulsky, M.A. (Moscow Pedagogical Institute), Teaching Fellow in Russian.

Doris Charrier Vladimiroff, A.B. (Duke), A.M. (Middlebury), Visiting Lecturer in Education. (Fall 1984)

Sibylle Leonor Wagner, Teaching Fellow in German.

Mary-Agnes Wine, A.B., A.M. (Mount Holyoke), Teaching Fellow in Biology.

Officers of Administration

GENERAL ADMINISTRATION

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), President.

Robert Carl Wilhelm, A.B. (Pomona), Ph.D. (Cornell), Dean of the College.

Alfred Herman Fuchs, A.B. (Rutgers), A.M. (Ohio), Ph.D. (Ohio State),
Dean of the Faculty.

John Loomis Heyl, A.B. (Trinity), Vice President for Development.

Dudley Hawthorne Woodall, A.B. (Amherst), M.B.A. (Pittsburgh),
Treasurer.

Rhoda Zimand Bernstein, A.B. (Middlebury), A.M. (New Mexico),
Registrar.

Anita Gail Wollison, B.S., M.Ed. (Delaware), Assistant Dean of Students.

Janet B. Smith, A.B. (Wells), A.M., M.Lib.Stud. (Boston University), As-
sistant to the President.

Lisa Anne Barresi, A.B. (Bowdoin), Assistant to the Dean of Students.

ADMISSIONS OFFICE

William Robert Mason III, A.B. (Bowdoin), Director.

Thomas L. Deveaux, A.B. (Williams), Associate Director.

Margaret Edison Dunlop, A.B. (Wellesley), Associate Director.

Avis E. Hinkson, A.B. (Barnard), Admissions Counselor.

Brendan Charles McNally, A.B. (Bowdoin), Admissions Counselor.

William Parke Montague, A.B. (Bowdoin), Assistant Director.

Sammie Timothy Robinson, A.B. (Bowdoin), A.M. (Smith), Assistant
Director.

ATHLETICS

Sidney John Watson, B.S. (Northeastern), Director of Athletics.

AUDIOVISUAL SERVICES

James Alan Clayman, Technician.

BETHEL POINT MARINE RESEARCH STATION

Edward Smith Gilfillan III, A.B. (Yale), M.S., Ph.D. (British Columbia),
Director.

BRECKINRIDGE PUBLIC AFFAIRS CENTER

Anne Underwood, A.B. (The College of Wooster), M.S. (Ohio State),
Director.

BUSINESS OFFICE

Dudley Hawthorne Woodall, A.B. (Amherst), M.B.A. (Pittsburgh),
Treasurer.

Thomas Martin Libby, A.B. (Maine), Associate Treasurer and Business
Manager.

Sarah Jane Bernard, A.B. (Bates), C.M.A. (Laban Institute of Movement
Studies), Director of Payroll Services.

James Packard Granger, B.S. (Boston University), C.P.A., Controller.

Thomas Joseph Mallon, Accounting Office Manager.

Betty Mathieson Massé, Assistant to the Business Manager.

Barbara Ann MacPhee Wyman, Assistant to the Controller.

CAREER SERVICES

Harry Knight Warren, A.B. (Pennsylvania), Director.

Ann Semansco Pierson, Coordinator for Educational Programs and Place-
ment and Volunteer Service Programs.

Barbara Sirois Babkirk, A.B. (Maine), M.Ed. (New Hampshire), Career
Counselor.

Susan Deland Livesay, A.B. (Smith), Career Counselor.

CENTRALIZED DINING SERVICE

Myron Lewis Crowe, A.B. (Michigan State), Director.

Laurent Conrad Pinette, Assistant to the Director and Executive Chef.

Ezra Allen Stevens, Purchasing Agent.

CHEMISTRY LABORATORIES

Judith Cooley Foster, A.B. (Brown), A.M. (Rhode Island), Coordinator of Laboratories.

DUDLEY COE HEALTH CENTER

Roy Edward Weymouth, Jr., A.B. (Bowdoin), M.D. (Tufts), College Physician.

Geoffrey Beckett, B.S. (Western Michigan), P.A.-C. (Maine Medical Center), Physician's Assistant.

COMPUTING CENTER

Myron Whipple Curtis, A.B. (Bowdoin), A.M. (California, Los Angeles), Director.

Thomas S. Floury, A.B. (California, Los Angeles), M.S., Ph.D. (Wisconsin, Madison), Academic User Services Coordinator.

Mark Ingwald Nelsen, A.B. (California, Berkeley), Programmer/Analyst.

Carol Arlita Flewelling O'Donnell, A.B. (Maine), Administrative Applications Coordinator.

Stephen G. Smith, A.B. (Colby), M.B.A. (Maine), Administrative Applications Coordinator.

COUNSELING SERVICE

Aldo Francisco Llorente, M.D. (University of Havana), Director and College Counselor.

Michaelanne Rosenzweig, A.B. (Mount Holyoke), M.S. (Simmons), College Counselor.

DANCE PROGRAM

June Adler Vail, A.B. (Connecticut College), Director of the Dance Program.

DEVELOPMENT OFFICE

John Loomis Heyl, A.B. (Trinity), Vice President for Development.

Frederick Stewart Bartlett, A.B. (Bowdoin), Director of Management Systems.

Marice Hinton Bennett, A.B. (Bowdoin), Assistant to the Campaign Directors.

Mary Crowley Bernier, Assistant to the Vice President for Development.

- Andrew John Burke, A.B. (Bowdoin), Campaign Field Coordinator.
- Robert Melvin Cross, A.B. (Bowdoin), A.M. (Harvard), Secretary of the College.
- Josiah Hayden Drummond, Jr., A.B. (Colby), M.Ed. (Maine), Director of Planned Giving.
- Loring Edward Hart, A.B. (Bowdoin), A.M. (Miami), Ph.D. (Harvard), D.H.L. (Bowdoin, Norwich), Associate Campaign Director.
- John Wood Platt Holt, A.B. (Bowdoin), Assistant Campaign Director.
- Lisa Ann Holzwarth, A.B. (Bowdoin), Development Office Fellow.
- David Frederic Huntington, A.B. (Bowdoin), M.A.T. (New Hampshire), Director of Alumni Relations.
- Nancy Ireland, Director of Research and Special Events.
- Marilyn Nelson McIntyre, A.B. (Grinnell), M.P.A. (Pennsylvania State), Campaign Coordinator.
- Helen Elizabeth Pelletier, A.B. (Bowdoin), Editor of the *Bowdoin Alumni Magazine*.
- Albert Richard Smith II, A.B. (Trinity), Director of Annual Giving.
- Walter Joseph Sperling, A.B. (Wesleyan), Director of Corporate and Foundation Relations.

HAWTHORNE-LONGFELLOW LIBRARY

- Arthur Monke, A.B. (Gustavus Adolphus), M.S. in L.S. (Columbia), Librarian.
- John Bright Ladley, B.S. (Pittsburgh), M.L.S. (Carnegie Institute of Technology), Reference Librarian.
- Priscilla Hubon McCarty, A.B. (Brown), M.L.S. (Maine), Cataloger.
- Judith Reid Montgomery, A.B. (Valparaiso), M.L.S. (Kent State), Cataloger.
- Shirley A. Reuter, A.B. (New Hampshire), M.L.S. (Syracuse), Acquisitions Librarian.
- Edwin Joseph Saeger, A.B. (St. Joseph's College, Philadelphia), A.M. (Villanova), M.L.S. (Drexel), Cataloger.
- Donna Glee Sciascia, A.B. (Emporia), M.A. in L.S. (Denver), Head, Catalog Department.

Officers of Administration

Elda Gallison Takagi, B.S., A.M. (Maine), A.M., M.A. in L.S. (Michigan), Documents Librarian.

Aaron Weissman, A.B. (City College of New York), A.M., M.S. in L.S. (Columbia), Assistant Librarian and Head, Circulation Department.

MOULTON UNION

Harry Knight Warren, A.B. (Pennsylvania), Director.

Thomas Mark Beckley, A.B. (Bowdoin), Bear Necessity Manager.

Walter John Szumowski, Bookstore Manager.

**MUSEUM OF ART
AND PEARY-MACMILLAN ARCTIC MUSEUM**

Katharine Johnson Watson, A.B. (Duke), A.M., Ph.D. (Pennsylvania), Director.

Patricia McGraw Anderson, A.B. (Vassar), A.M. (Yale), Special Project Author.

John William Coffey II, A.B. (North Carolina, Chapel Hill), A.M. (Williams), Curator of Collections.

Richard G. Condon, A.B. (Rutgers), Ph.D. (Pittsburgh), Registrar/Curator, Peary-MacMillan Arctic Museum.

Miriam Look MacMillan, Sc.D. (Bowdoin), Associate Curator, Peary-MacMillan Arctic Museum.

Henrietta S. McBee, B.S. (Simmons), M.Ed. (Wheelock), A.M. (Syracuse), Ph.D. (North Carolina, Chapel Hill), Registrar.

Roxlyn Carole Yanok, Administrative Assistant to the Director.

PHYSICAL PLANT

David Newton Barbour, B.S. (Maine), M.B.A. (Southern Maine), Director.

John Stanley DeWitt, Superintendent of Mechanical Services.

Leo Paquin, Superintendent of Custodial Services.

George Paton, B.S. (Massachusetts, Amherst), Assistant Director.

Philip A. Sargent, B.S. (Maine), M.F. (Yale), College Forester.

Howard Ewing Whalin, Superintendent of Brunswick Apartments.

Robert Edward Wilson, Superintendent of Buildings and Grounds.

PICKARD THEATER

A. Raymond Rutan, A.B. (Bowdoin), M.F.A. (Yale), Director.

Michael Paul Roderick, A.B. (Maine), Theater Technician.

PUBLIC RELATIONS AND PUBLICATIONS

Richard Alan Mersereau, A.B. (Bowdoin), M.A.T. (Wesleyan), Director.

Craig Sterling Cheney, A.B. (Bowdoin), Assistant Director.

Rachel Davenport Dutch, A.B. (Maine), Assistant Director.

Amy Caroline Johnson, A.B. (Bowdoin), Fellow.

Lucie Giegengack Teegarden, A.B. (College of New Rochelle), A.M. (Yale),
Associate Director.

SECURITY

Lawrence Winters Joy, Director of Campus Security.

SPECIAL AND SUMMER PROGRAMS

Edmund A. Peratta, A.B. (Bowdoin), A.M. (New Hampshire), Director.

STUDENT AID OFFICE

Walter Henry Moulton, A.B. (Bowdoin), Director.

Sarah-Louise Stella LaJoie, A.B. (Bowdoin), Student Aid Fellow.

UPWARD BOUND

Doris Charrier Vladimiroff, A.B. (Duke), A.M. (Middlebury), Project
Director.

Ludger Hilare Duplessis, A.B. (Bowdoin), Assistant Director.

Scott William Bradley, A.B. (Maine, Orono), Counselor.

Campus and Buildings

BOWDOIN IS LOCATED in Brunswick, Maine, a town of approximately 18,000 population, first settled in 1628, on the banks of the Androscoggin River, a few miles from the shores of Casco Bay. The campus, originally a sandy plain covered with blueberries and pines, is a tract of 110 acres containing more than fifty buildings and several playing fields.

Massachusetts Hall is the oldest building on the campus, having been completed in 1802. For several years it housed the students, and all classes were held there. Now used for faculty offices, the building was designated a Registered Historical Landmark in 1971.

The work of the College has its heart and center in Nathaniel Hawthorne-Henry Wadsworth Longfellow Library, which contains the accumulations of over a century and a half. The nucleus of its 620,000 volumes is the collection of books and pamphlets bequeathed by James Bowdoin. These "Bowdoin Books," rich in French literature, American history, and mineralogy, were supplemented by the same generous benefactor's gift of an art collection containing many paintings of old and modern masters. Among the paintings are the portraits of Thomas Jefferson and James Madison by Gilbert Stuart, and a notable collection of portraits by the distinguished colonial artist Robert Feke.

Classes are held in Adams, Banister, Cleaveland, Gibson, Hubbard, and Sills halls, the Afro-American Center, Coles Tower, Searles Science Building, Smith Auditorium, and the Visual Arts Center. When students are not engaged in academic work, they have at their disposal many well-equipped recreational facilities. These include the Dayton Arena, Curtis Pool, Hyde Athletic Building, Morrell Gymnasium, Moulton Union, Pickard Field House, Sargent Gymnasium, and some seventy-five acres of playing fields. Another valuable adjunct for the health of the student is the Dudley Coe Health Center.

COLLEGE BUILDINGS

Seth Adams Hall was erected in 1860-1861 and named in honor of Seth Adams, of Boston, who contributed liberally toward its construction. From 1862 until 1921 it housed the classrooms of the Medical School of Maine. It now houses the Smyth Mathematical Library, named in memory of William Smyth, of the Class of 1825, who was professor of mathematics from 1828 to 1868. The building also contains classrooms, lecture rooms, and the offices of the Department of Mathematics. It stands west of the Presidents' Gateway.

Appleton Hall (1843), named in memory of the second president of the College; **Coleman Hall** (1958), named in honor of the family of the donor,

Jane Coleman Pickard (Mrs. Frederick W. Pickard); **Hyde Hall** (1917), named in memory of the seventh president of the College; **Maine Hall** (1808), known originally as "the College" and named later to commemorate the admission of Maine to the Union; **Moore Hall** (1941), named in honor of his father by the donor, Hoyt Augustus Moore, LL.D., of the Class of 1895; and **Winthrop Hall** (1822), named in memory of Governor John Winthrop of the Massachusetts Bay Colony, are the six campus dormitories. In 1964-1966 the interiors of Appleton, Maine, and Winthrop were completely renovated.

Ashby House, located on Maine Street across from Hawthorne-Longfellow Library, was given by the estate of the Reverend Thompson E. Ashby, for many years minister of the First Parish Church. An eighteenth-century frame house, it has been used over the years as a faculty residence, eating hall, and student dormitory. It was renovated in 1974 and currently houses the Department of Sociology and Anthropology.

Baxter House, at 10 College Street, was purchased in 1971 and is used as a student residence. For nearly twenty years it was the chapter house of Delta Psi of Sigma Nu, which established a scholarship fund at the College with the proceeds from the sale. Named for the Baxter family in recognition of its many contributions to Bowdoin and the State of Maine, it was built by Hartley C. Baxter, of the Class of 1878, one of five Baxters to serve on the Governing Boards and stepbrother of Percival J. Baxter, of the Class of 1898, governor of Maine from 1921 to 1925.

Burnett House, 232 Maine Street, is a residence for students which was acquired in 1972. From 1965 to 1970 it was the home of Phi Delta Psi Fraternity. For many years it was the home of Professor and Mrs. Charles T. Burnett. Professor Burnett, chairman of the Department of Psychology, was an active member of the faculty for forty-two years before his retirement in 1944. The house was built in the 1860s by a retired seafarer and purchased by the Burnetts in 1920.

Chamberlain Hall, constructed in 1964, was named in memory of General Joshua Lawrence Chamberlain, LL.D., of the Class of 1852, Civil War hero, governor of Maine, and president of Bowdoin from 1871 to 1883. It houses the Admissions Office.

The Chapel, a Romanesque church of undressed granite designed by Richard Upjohn, was built during the decade from 1845 to 1855 from funds received from the Bowdoin estate. The façade is distinguished by twin towers and spires which rise to the height of 120 feet. The interior resembles the plan of English college chapels, with a broad central aisle from either side of which rise the ranges of seats. The lofty walls are decorated with twelve large paintings. The Chapel stands as a monument to President Leonard Woods, fourth

president of the College, under whose personal direction it was erected. The flags are of the original thirteen colonies plus Maine, which was a part of Massachusetts at the time of the founding of the College in 1794. A set of eleven chimes, the gift of William Martin Payson, of the Class of 1874, was installed in the southwest tower in 1923. In the Chapel is an organ given in 1927 by Cyrus H. K. Curtis, LL.D.

That portion of the building which formerly housed the reading rooms and stack space of the college library was named **Banister Hall** in 1850 in recognition of the gifts of the Honorable William Banister. It contains the offices, classrooms, and laboratories of the Department of Psychology. The human psychobiology laboratory is named in honor of psychologist Harry Helson, Ph.D., of the Class of 1921.

Chase Barn Chamber, named in memory of Stanley Perkins Chase, Ph.D., of the Class of 1905, Henry Leland Chapman Professor of English Literature from 1925 to 1951, and Mrs. Chase, is a handsome room located in the ell of the **Johnson House**. Designed by Felix Burton, of the Class of 1907, in the Elizabethan style, the chamber is heavily timbered, contains a small stage, an impressive fireplace, and houses many of the books from the Chase library. It is used for small classes, seminars, and conferences.

Parker Cleaveland Hall, designed by McKim, Mead & White, was dedicated in 1952. The building was made possible by donors to the Sesquicentennial Fund. It houses the Department of Chemistry and bears the name of Parker Cleaveland, who taught chemistry and mineralogy at Bowdoin from 1805 to 1858 and was a pioneer in geological studies. Special gifts provided the Kresge Laboratory of Physical Chemistry, the Wentworth Laboratory of Analytical Chemistry, the 1927 Room (a private laboratory), the Adams Lecture Room, the Burnett Room (a seminar room), and the Dana Laboratory of Organic Chemistry.

Dudley Coe Health Center is a three-story brick building erected in 1916-1917. It was given by Thomas Upham Coe, M.D., of the Class of 1857, in memory of his son, and stands in the pines to the south of the Hyde Athletic Building. In 1957 it was enlarged through a gift by Agnes M. Shumway, A.M. (Mrs. Sherman N. Shumway). In 1962 it was licensed by the state as a private general hospital. An addition was built in 1974 to provide additional patient care area. The second floor houses the offices of the Counseling Service; the third floor the Gynecological Services.

Coles Tower was completed in 1964 and served for several years as the residential unit of the Senior Center. When the Senior Year Program was ended in 1979, the sixteen-story tower was named in honor of James Stacy Coles, Ph.D., D.Sc., LL.D., Sc.D., ninth president of the College and the program's chief proponent. The building includes living and study quarters,

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Guided Campus Tours from Moulton Union

During the academic year: weekdays, hourly from 10 am through 4 pm; Saturdays, 10:15 and 11:30 am. Summer hours: weekdays only 9:30, 10:30, 11:30 am, 2, 3, and 4 pm. No tours on most legal holidays.



seminar and conference rooms, lounges, and accommodations for official guests of the College. The first floor is dedicated to the memory and honor of the late Henry Quinby Hawes, A.M., of the Class of 1910, and Mrs. Hawes.

Copeland House, at 88 Federal Street, was acquired in 1972. A residence for students, it was formerly the home of Manton Copeland, Ph.D., who taught biology at the College from 1908 until 1947 and was Josiah Little Professor of Natural Science Emeritus at the time of his death in 1971.

Marshall Perley Cram Alumni House, at 83 Federal Street, was bequeathed to the College in 1933 on the death of Professor Marshall Perley Cram, Ph.D., of the Class of 1904. Renovated in 1962 and maintained by the College, it is the center of alumni activities at Bowdoin and contains lounges, rest rooms, and other facilities for the use of visiting alumni and their families and guests. The Ladies' Lounge, located on the second floor, was presented by the Society of Bowdoin Women in 1965. Displayed on the first floor is a collection of polar bears done in crystal, porcelain, and other media that was the gift of the widow of Daniel L. Dayton '49 in 1974.

Curtis Swimming Pool was given to the College in 1927 by Cyrus H. K. Curtis, LL.D. The pool is housed in a separate wing attached to the Sargent Gymnasium. It measures thirty by seventy-five feet.

Dayton Arena, named in memory of Daniel L. Dayton, Jr., of the Class of 1949, was built in 1956 with contributions from alumni, students, and friends. It contains seats for 2,400 spectators, a regulation ice-hockey rink with a refrigerated surface 200 feet long by 85 feet wide, locker rooms, and a snack bar. During 1972 and 1973 numerous improvements were made, including the installation of brighter lights and additional ice-making equipment, which enables the arena to be operated year-around. It is the site of intercollegiate and intramural hockey contests, as well as recreational skating.

85 Federal Street, the former home of Bowdoin's presidents, was built in 1860 by Captain Francis C. Jordan and originally stood on the lot at 77 Federal Street. It was purchased by the College in 1867 and was occupied by President Harris until 1871. The house was purchased by Peleg W. Chandler, who had it moved in 1874 to its present location at the corner of Federal and Bath streets. At a later date the College reacquired the house, and shortly after President Hyde assumed office in 1885, it became his official residence. The ballroom was added in 1926. It now houses the offices of the vice president for development and his staff, the alumni relations office, the alumni fund secretary's office, and the offices of the *Bowdoin Alumni Magazine*.

Getchell House, located at 5 Bath Street, is diagonally opposite Adams Hall.

It was given in 1955 by Miss Gertrude Getchell, of Brunswick, and completely refurbished in 1956. It houses the public relations and publications offices.

The Harvey Dow Gibson Hall of Music, named for Harvey Dow Gibson, LL.D., of the Class of 1902, was dedicated in 1954. Its construction was made possible by funds donated by Mrs. Harvey Dow Gibson; by Mrs. Gibson's daughter, Mrs. Whitney Bourne Choate; by the Manufacturers Trust Company of New York; and by several friends of Mr. Gibson. Designed by McKim, Mead & White, the building contains class, rehearsal, and practice rooms, a recording room, several rooms for listening to records, offices, and a music library. A recital hall was completed in 1978. The common room is richly paneled in carved walnut from the music salon designed in 1724 by Jean Lassurance (1695-1755) for the Hôtel de Sens in Paris.

Ham House, at 3 Bath Street, was for many years the residence of Roscoe J. Ham, L.H.D., George Taylor Files Professor of Modern Languages from 1921 to 1945. Acquired in 1954, it houses the offices of Bowdoin Upward Bound.

Harpwell Street Apartments, adjacent to Pickard Field, and **Pine Street Apartments**, across from Whittier Field, were opened in the fall of 1973. There are two buildings of contemporary design at each location, and each of the buildings contains six apartments. The apartments, which accommodate up to ninety-six students, were built to meet the need for additional housing and to provide an alternative to living in a conventional dormitory.

Nathaniel Hawthorne-Henry Wadsworth Longfellow Library, designed by Walker O. Cain and Associates, of New York, was built in 1964-1965 from funds contributed during the Capital Campaign. It was named after two of Bowdoin's literary giants, both members of the Class of 1825. It houses the principal portions of the library of the College and—in its western end, named **Hawthorne-Longfellow Hall**—most of the general administrative offices of the College. In 1984, the Hubbard Hall-library connector was completed, as well as renovations to Hubbard's book stack area, additional open-shelf space, and increased study areas. Also included in the project was climate control for a remodeled and enlarged Special Collections Suite.

Hubbard Grandstand was given in 1904 by General Thomas H. Hubbard, LL.D., of the Class of 1857. It is situated on **Whittier Field**, a tract of five acres, named in honor of Frank Nathaniel Whittier, M.D., of the Class of 1885, for many years director of the gymnasium, who was largely instrumental in its acquisition for varsity football and track in 1896. An electrically operated scoreboard, the gift of the widows of Harvey Dow Gibson, LL.D., of the Class of 1902, and Adriel Ulmer Bird, A.M., of the Class of 1916, was erected in 1960. Surrounding the field is the **John Joseph Magee Track**, an Olympic regulation all-weather track given by alumni and friends in memory

of Mr. Magee, coach, trainer, and director of track and field athletics from 1913 to 1955.

Hubbard Hall, designed by Henry Vaughan and erected in 1902-1903, was the gift of General Hubbard and his wife, Sibyl Fahnestock Hubbard. For over sixty years, until the fall of 1965, it was the College library. It is now used for faculty offices, examination rooms, and the Department of Geology. Located in the basement is the Computing Center, which contains a PDP-10 time-sharing system. The Peary-MacMillan Arctic Museum is located on the first floor, and the Susan Dwight Bliss Room for rare books and bindings remains on the second floor. During the spring of 1977 the large west wing of the second floor was restored to its original condition and now provides additional study area for students.

Johnson House, named in memory of Henry Johnson, Ph.D., Litt.D., of the Class of 1874, a distinguished member of the Bowdoin faculty from 1877 to 1918, and Mrs. Johnson, is located at the corner of Maine and Boody streets across from the southwestern entrance to the campus. Bequeathed to the College in 1957, it is used as the home of the Dean of the College. The house was designated a Registered Historical Landmark in 1975.

Little-Mitchell House, at 6-8 College Street, houses the John Brown Russwurm Afro-American Center. The Mitchell House was named in honor of Wilmot Brookings Mitchell, L.H.D., of the Class of 1890, Edward Little Professor of Rhetoric and Oratory from 1893 to 1939. It was given by Professor Mitchell in 1961. The Little House, the 8 College Street side of the connected buildings, was acquired in 1962.

Little-Mitchell House was opened as the Afro-American Center in 1970 and rededicated as the John Brown Russwurm Afro-American Center in 1979 in honor of John Brown Russwurm, of the Class of 1826, Bowdoin's first black graduate, publisher, and governor of the colony of Maryland in Liberia at the time of his death in 1851. The center houses the Afro-American Studies Program; the Herman S. Dreer Reading Room, named in honor of a black graduate of the Class of 1910; and a 1,500-volume library of African and Afro-American source materials.

Massachusetts Hall, planned in 1798 and completed in 1802, was the first College building erected. In 1936 it was remodeled, and five years later, through a gift of Frank Herbert Swan, LL.D., of the Class of 1898, the third floor was restored and furnished to accommodate faculty meetings. Until 1965 the building housed the offices of some of the administrative officers. Since then, it has been used for faculty offices. In 1971 the building was designated a Registered Historical Landmark.

Mayflower Apartments, at 14 Belmont Street, were acquired in 1972.

Located within a few minutes' walk of the campus, the complex can accommodate a minimum of forty students.

Memorial Hall, built in 1868, is a structure of local granite in the Gothic style. It is a memorial to the alumni and students of the College who served in the Civil War and whose names and ranks are inscribed on bronze plaques in the lobby. The lower floor contains classrooms and an experimental theater. The entire interior was rebuilt in 1954-1955 to house the Pickard Theater, one of the gifts of Frederick William Pickard, LL.D., of the Class of 1894. On the lower level is a plaque memorializing William H. Moody, of the Class of 1956, theater technician from 1958 until his death in 1976.

Malcolm E. Morrell Gymnasium is a 50,000-square-foot building connected to Sargent Gymnasium. Built in 1964-1965 from funds contributed during the Capital Campaign, it was in 1969 named in memory of Malcolm Elmer Morrell, of the Class of 1924, Bowdoin's director of athletics from 1928 to 1967. The gymnasium contains a modern basketball court with seats for about 2,500 persons, four visiting team rooms, eleven squash courts, offices for the director of athletics and his staff, and other rooms for physical education purposes.

The Moulton Union, designed by McKim, Mead & White, was built in 1927-1928. It was given and partially endowed by Augustus Freedom Moulton, LL.D., of the Class of 1873, as a social, recreational, and service center for the College. In 1964-1965, a two-story extension was added on the south and east sides of the building. The spacious main lounge and several smaller, intimate lounges and student activity areas are provided for general social purposes. The Union also contains the College reception, information, and scheduling center; the campus telephone switchboard; a bookstore; dining facilities; and a game room. The Union stands just outside the quadrangle opposite Appleton, Hyde, and Moore halls.

The Observatory was erected in 1890-1891 with funds given by John Taylor, Esq., of Fairbury, Illinois. It stands on the southeast corner of Pickard Field and is reached from the Harpswell Road. In 1965 it was renovated and a new telescope was installed.

Pickard Field House stands at the entrance of Pickard Field. It was given in 1937 by Frederick William Pickard, LL.D., of the Class of 1894, and Mrs. Pickard. The building contains lockers and showers for men and women. **Pickard Field**, a tract of sixty-six acres, was presented to the College by Mr. Pickard in 1926. In 1952 nine acres were added to the field by purchase, making a total area of seventy-five acres, thirty of which are fully developed playing fields. The field contains the varsity and freshman baseball diamonds, several spacious playing fields for football and soccer, and ten tennis courts.

Pickard Theater in Memorial Hall, also a gift of Mr. Pickard, was dedicated in 1955. It has a seating capacity of slightly more than 600 and a stage 55 feet wide and 30 feet deep. The space from the stage floor to the gridiron is 48 feet. Adorning the walls of the auditorium are rubbings of six large reliefs of the Chinese emperor T'ai Tsung's war horses. The reliefs were executed about A.D. 637 for the emperor's tomb and were possibly from designs of Yen Li-pen. The rubbings were the gift of Walter H. Mallery in 1955.

Rhodes Hall, formerly the Bath Street Primary School, was purchased from the Town of Brunswick in 1946 to provide additional facilities for instruction and administration. The building was named to commemorate the fact that three pupils of the school later achieved distinction as Rhodes scholars at Oxford University. Rhodes Hall houses the offices of the Department of Physical Plant.

Sargent Gymnasium and General Thomas Worcester Hyde Athletic Building were erected in 1912. The gymnasium was built from contributions from many of the students and alumni, and named in honor of Dudley A. Sargent, M.D., Sc.D., of the Class of 1875; the athletic building was given by John Hyde, Esq., of Bath, in memory of his father, Thomas Worcester Hyde, A.M., of the Class of 1861. In 1965-1966 Sargent Gymnasium was altered and renovated to make it part of the comprehensive plan for the indoor athletic facilities of the College.

Mary Frances Searles Science Building, designed by Henry Vaughan, was built in 1894 and renovated in 1952. It was the gift of Edward F. Searles in memory of his wife. With the Walker Art Building and Gibson Hall, it forms the western side of the quadrangle. The building contains lecture rooms, laboratories, and libraries of the Departments of Biology and Physics. A battery of solid-state electronic equipment was installed in the Physics Department in 1974. It was purchased with funds provided by the bequest of Constance H. Hall. She was the daughter of Edwin H. Hall of the Class of 1875, best known for his discovery of the Hall Effect, which has become a key principle in the design of solid-state electronic components.

Sills Hall and Smith Auditorium, designed by McKim, Mead & White, were completed in the autumn of 1950. The main structure was made possible by the first appropriations from the Sesquicentennial Fund and was named after the eighth president of the College, Kenneth Charles Morton Sills (1879-1954), of the Class of 1901; the wing, containing an auditorium seating 210 persons, was built by appropriation of the Francis, George, David, and Benjamin Smith Fund, bequeathed by Dudley E. Wolfe, of Rockland. A language laboratory and speech center are located in the wing. In 1968 a donor who wished to remain anonymous established the Constance and Albert Thayer

Speech Center Fund to maintain the speech center. The fund was named in honor of Albert R. Thayer, A.M., of the Class of 1922, Harrison King McCann Professor of Oral Communication Emeritus, and his wife.

Winfield Smith House, at 59 Harpswell Street, was acquired in 1972. A residence for students, it is named in memory of L. Winfield Smith, of the Class of 1907, who was born and raised in the house, "in recognition of the Smith family's long and devoted interest in Bowdoin."

10 Cleaveland Street is a residence for students.

12 Cleaveland Street houses the offices of the *Bowdoin Orient*.

30 College Street was acquired by the College in 1977 and is used as a residence for approximately fifteen students.

The Visual Arts Center, completed in 1975, was constructed with funds given through the 175th Anniversary Campaign. Connected to the Walker Art Building via an underground area which provides not only inter-access but also an exhibition gallery, the center contains some 23,000 square feet of instructional space. A 300-seat auditorium was dedicated in recognition of a generous grant from the Kresge Foundation. One of the classrooms has been dedicated in honor of Philip C. Beam, Ph.D., Henry Johnson Professor of Art and Archaeology Emeritus and a member of the faculty for more than forty years. The photography area was dedicated to the memory of Alan H. Wiley, and the printing and graphics area was given by an alumnus who wishes to remain anonymous.

Walker Art Building, designed by McKim, Mead & White, was erected in 1892-1894 and extensively renovated in 1975-1976. It was given by the Misses Harriet and Sophia Walker, of Waltham, Massachusetts, as a memorial to their uncle, Theophilus Wheeler Walker, of Boston, a cousin of President Woods. A bronze bulletin board in memory of Henry Edwin Andrews, A.M., of the Class of 1894, director of the museum, 1920-1939, is located in Sculpture Hall. The building is surrounded on three sides by a paved terrace with supporting walls and parapets of granite. Granite and bronze sculptures adorn the front wall. Following the renovation of the building, the South Gallery was dedicated to the memory of John A. and Helen P. Becker. The Central Gallery was dedicated to the memory of John H. Halford, Class of 1907, overseer and trustee of the College for twenty years.

Wentworth Hall was named in memory of Walter V. Wentworth, Sc.D., of the Class of 1886, an overseer of the College from 1929 to 1958. Constructed in 1964, it is a two-story building adjacent to Coles Tower and contains a dining room, main lounge, and other rooms for instructional, social, and cultural activities. In 1974 the main lounge was dedicated to the

memory of Athern P. Daggett, Ph.D., LL.D., of the Class of 1925, acting president from 1967 to 1969 and for many years William Nelson Cromwell Professor of Constitutional and International Law and Government.

Women's Resource Center, at 24 College Street, contains the office and library of the Bowdoin Women's Association and provides student housing.

OTHER MEMORIALS

Albert Abrahamson '26 Reading Room, on the top floor of the newly renovated stack area of Hubbard Hall, is dedicated to the George Lincoln Skolfield, Jr., Professor of Economics Emeritus, member of the faculty for twenty-five years and generous benefactor of the library renovation project.

The Harold Lee Berry Special Collections Suite, in Hawthorne-Longfellow Library, is named in memory of Harold Lee Berry, A.M., of the Class of 1901, for nearly forty years a member of the Governing Boards, and generous benefactor of the College. The suite comprises several rooms in the northeast area of the third floor.

The Bowdoin Polar Bear, placed in 1937, is a memorial to members of the Class of 1912. The base and life-size statue were carved by Frederick George Richard Roth. The figure stands in front of the entrance to the Sargent Gymnasium.

The Stuart Franklin Brown Lobby, in Hawthorne-Longfellow Library, is a memorial to Stuart Franklin Brown, of the Class of 1910, and was the gift of Mrs. Brown.

The Calder Mobile was purchased with funds given in the memory of Charles B. Price III, of the Class of 1974, who died in 1972. Purchased because Price was an admirer of the work of Alexander Calder, the mobile hangs in the Hawthorne-Longfellow Library. Price, a biology and economics major, was a Dean's List student and James Bowdoin Scholar.

Catlin Path, extending from the Warren Eastman Robinson Gateway to Hubbard Hall, was laid in 1954 through the generous gift of Warren Benjamin Catlin, Ph.D., for many years Fayerweather Professor of Economics and Sociology.

The Chase Memorial Lamps, dedicated to the memory of Stanley Perkins Chase, Ph.D., of the Class of 1905, Henry Leland Chapman Professor of English Literature (1925-1951), stand on the Moulton Union terrace. They were presented to the College by Mrs. Chase in 1954.

The Class of 1875 Gateway was erected in 1901 as a memorial to members of the class. It forms the Maine Street entrance of the Class of 1895 Path.

The Class of 1878 Gateway, erected in 1903, is a memorial to members of the class. It is on Bath Street between Memorial Hall and the First Parish Church.

The Class of 1886 Pathways are a network of walks laid in 1945 as a memorial to members of his class through the generosity of Walter V. Wentworth, Sc.D., of the Class of 1886. The pathways traverse an area lying north of Massachusetts Hall.

The Class of 1895 Path was laid in 1945 as a memorial to members of the class. It extends from the Chapel to the Class of 1875 Gateway.

The Class of 1898 Bulletin Board, erected in 1924 near the Chapel, is a memorial to members of the class. It is made of bronze, is double-faced and illuminated.

The Class of 1903 Gateway, erected in 1928, is a memorial to members of the class. It forms the main entrance to the Whittier Athletic Field.

The Class of 1909 Organ, an electronic instrument for use in the Pickard Theater, was presented by the Class of 1909 on the occasion of its fiftieth anniversary and dedicated in June 1960. A fund given at the same time is for the maintenance of the organ and for the support of musical education in the College.

The Class of 1910 Path was laid in 1940 as a memorial to members of the class. It extends from Bath Street to Coleman Hall, running parallel to the four dormitories and in front of the entrance to the Chapel.

The Class of 1914 Librarian's Office, in the Hawthorne-Longfellow Library, is in honor of the members of the Class of 1914, who made a specific gift for this purpose.

The Class of 1916 Path was laid in 1946 as a memorial to members of the class. It extends from Massachusetts Hall to the Alpheus Spring Packard Gateway.

The Class of 1919 Path, laid in 1945, is a memorial to members of the class. It extends from the north entrance of Winthrop Hall, past the entrances to Massachusetts Hall and Memorial Hall, to the Franklin Clement Robinson Gateway.

The Class of 1922 Fountain, between Hawthorne-Longfellow Library and Hubbard Hall, was constructed in 1968. It is the gift of Mrs. John C. Pickard of Wilmington, Delaware, in honor of her husband's class. The fountain was designed by André R. Warren and was constructed by workmen of the Department of Physical Plant.

The Class of 1924 Radio Station (WBOR, "Bowdoin-on-Radio") was given by the Class of 1924 on the occasion of its twenty-fifth reunion. The station, installed in 1951 on the second floor of the Moulton Union, contains two broadcasting studios and a fully equipped control room.

The Class of 1929 Electronic Chimes System, for automation of the Chapel chimes, was presented by the Class of 1929 on the occasion of its fortieth reunion. A fund for maintenance of the system was established at the same time.

The Class of 1937 Lounge, in the Cram Alumni House, was presented by the Class of 1937 on the occasion of its twenty-fifth reunion. It is a large, informal, and rustic room, with pine furniture, old pictures of Bowdoin and of Brunswick, and a large hewn granite fireplace. The lounge was given in memory of Harold L. Cross, Jr., David T. Deane, J. Donald Dyer, and Maxwell A. Eaton, who gave their lives in the service of their country during World War II.

The Class of 1938 Newspaper Room, in the Hawthorne-Longfellow Library, is in honor of the members of the class. The room is on the first floor to the right of the entrance.

The Class of 1942 Cross was placed behind the reading stand in the Chapel in 1952 in memory of class members who gave their lives during World War II.

The Harry Howard Cloudman Drinking Fountain, erected in 1938, is in memory of Harry Howard Cloudman, M.D., of the Class of 1901, one of the outstanding athletes at the turn of the century. It stands near the Sargent Gymnasium.

The Robert Peter Tristram Coffin Reading Room, in the Hawthorne-Longfellow Library, is in memory of Robert Peter Tristram Coffin, Litt.D., of the Class of 1915, a distinguished author, poet, and professor. The room was the gift of the Class of 1915 on the occasion of its fiftieth reunion and occupies the northern bay on the first floor.

The Colbath Room, in the Morrell Gymnasium, is a memorial to Henry Jewett Colbath, of the Class of 1910, an outstanding athlete, dedicated teacher, and coach.

The William John Curtis 1875 Room, in the Hawthorne-Longfellow Library, is a memorial to William John Curtis, LL.D., of the Class of 1875, for over twenty-five years an overseer and trustee of the College, and a generous benefactor always in the name of his class. The room, in the northeast corner of the first floor, is used for current periodicals.

Daggett Lounge, the main lounge in Wentworth Hall, was dedicated in 1974 to the memory of Athern P. Daggett, Ph.D., LL.D., of the Class of 1925.

Professor Daggett, a member of the faculty for more than forty years and acting president from 1967 to 1969, was William Nelson Cromwell Professor of Constitutional and International Law and Government at the time of his death in 1973.

The Dane Flagpole, in honor of Francis Smith Dane, of the Class of 1896, stands in the northwest corner of Whittier Field. The gift of Mrs. Annie Lawrence E. Dane and a member of her family, the flagpole was placed in 1954 in recognition of Mr. Dane's efforts as an undergraduate to acquire an adequate playing field for the College.

The James Frederick Dudley Classroom in Banister Hall was renovated and furnished in 1954 as a memorial to James F. Dudley, A.M., of the Class of 1865, by the bequest of Nettie S. Dudley.

The William Pitt Fessenden Conference Room, in Hawthorne-Longfellow Hall, is a memorial to William Pitt Fessenden, LL.D., of the Class of 1823, United States senator 1854-1864, 1865-1869; United States secretary of the treasury 1864-1865; and overseer and trustee of the College from 1843 to 1869. The room is on the second floor, near the offices of the president and deans.

The Melville Weston Fuller Reading Room, in Hawthorne-Longfellow Library, is a memorial to Melville Weston Fuller, LL.D., of the Class of 1853, chief justice of the United States Supreme Court from 1888 to 1910, and an overseer and trustee of the College from 1875 to 1910. The room occupies the southern bay on the first floor.

The Gardner Bench, near Hawthorne-Longfellow Library, is dedicated to the memory of William Alexander Gardner, of the Class of 1881, and was presented to the College by Mrs. Gardner in 1954.

The Greene Suite, an apartment on the sixteenth floor of Coles Tower, is a memorial to the Reverend Joseph K. Greene, of the Class of 1855, and to Professor Theodore M. Greene, L.H.D., and his wife Elizabeth R. Greene. The Reverend Mr. Greene, father of Professor Greene, was a missionary to Turkey. Professor and Mrs. Greene lived in the suite from 1966 to 1969 while he was visiting professor of philosophy.

Hutchinson Lounge and **Hutchinson Terrace**, in Wentworth Hall, are memorials to Charles Lyman Hutchinson, of the Class of 1890, a prominent lawyer in Portland. They are on the south side of the building between the main dining room and lounge.

The Elijah Kellogg Tree, a large pine dedicated to the memory of the Reverend Elijah Kellogg, A.M., of the Class of 1840, stands near the corner of Bath Street and Sills Drive.

The Fritz C. A. Koelln Room, in Sills Hall, was dedicated in 1971 in honor of Fritz C. A. Koelln, Ph.D., George Taylor Files Professor of Modern Languages Emeritus and a member of the Department of German from 1929 until his retirement in 1971, "in recognition of his devoted service to the College and the inspiration he has been to so many undergraduates over the years."

The Donovan D. Lancaster Lounge, in the Moulton Union, was named in November 1970 in honor of Donovan D. Lancaster, of the Class of 1927, Director of the Moulton Union and the Centralized Dining Service Emeritus and a member of the College staff for over forty years. The lounge is used for lectures and exhibitions of art and photography throughout the year.

The George Thomas Little Bibliography and Card Catalogue Area, in Hawthorne-Longfellow Library, is a memorial to George Thomas Little, Litt.D., of the Class of 1877, librarian of the College from 1885 to 1915. The area occupies the center portion of the first floor.

Little Ponds Wildlife Sanctuary is the gift of Mrs. Harold Trowbridge Pulsifer, in memory of her husband, and Sheldon Ware, a neighbor. Located at Bethel Point, East Harpswell, and the result of a series of gifts beginning in 1961, this tract of fifteen acres includes a meadow, pond, woodland, and shore frontage. It is used for the study and conservation of wildlife and is the site of the Bowdoin College Marine Laboratory.

The Harrison King McCann Music Lounge, on the sixteenth floor of the Coles Tower, is a memorial to Harrison King McCann, A.M., of the Class of 1902, for thirty years an overseer of the College.

The Cecil Cleophus McLaughlin Study, in Chamberlain Hall, is a memorial to Cecil Cleophus McLaughlin, M.D., of the Class of 1923. The study was the gift of his wife.

The John Joseph Magee Track, surrounding Whittier Field, was given by a group of alumni and friends to honor the memory of John Joseph Magee, coach, trainer, and director of track and field athletics from 1913 to 1955 and an Olympic team coach in 1920, 1924, 1928, and 1932. Constructed in 1970, the Olympic regulation all-weather track was dedicated in 1971.

The Magee Training Room, in the Morrell Gymnasium, is another memorial to Coach Magee.

The Memorial Flagpole, designed by McKim, Mead & White, was erected in 1930 with funds given by the alumni in memory of the twenty-nine Bowdoin men who lost their lives in World War I. The Honor Roll is engraved on the mammoth granite base surmounted by ornamental bronze. The flagpole

stands in the southwestern corner of the campus between Hubbard Hall, Walker Art Building, and Gibson Hall.

The Wilmot Brookings Mitchell Lounge, on the second floor of Wentworth Hall, is a memorial to Wilmot Brookings Mitchell, Litt.D., L.H.D., of the Class of 1890, a beloved teacher of English for almost fifty years.

The Morrell Office, in the Malcolm E. Morrell Gymnasium, was given by members of the Class of 1924 in honor of their classmate Malcolm Elmer Morrell, director of athletics from 1928 to 1967. It is the office of the director of athletics.

The Dean Paul Nixon Lounge-Conference Room, in Hawthorne-Longfellow Library, is a memorial to Paul Nixon, L.H.D., LL.D., for over forty years a teacher of Latin and Dean of the College from 1918 to 1947. The room is on the southeast corner of the third floor.

The Alpheus Spring Packard Gateway, erected in 1940 on College Street, is a memorial to Alpheus Spring Packard, D.D., of the Class of 1816, a member of the Bowdoin faculty from 1819 to 1884.

The Peucinian Room, built in 1951, is in a corner of the lower floor of Sills Hall. It is paneled in timber taken from the Bowdoin Pines. The motto of the Peucinian Society, *Pinos loquentes semper habemus*, is carved on a heavy timber above the fireplace. The fireplace and paneling were the gift of the Bowdoin Fathers Association in memory of Suzanne Young (1922-1948).

The Pickard Trees, twelve hawthorns in memory of Jane Coleman Pickard (Mrs. Frederick William Pickard), donor of Coleman Hall and co-donor of the Pickard Field House, were replanted around Coleman Hall by the Society of Bowdoin Women and dedicated in June 1959.

The Franklin Pierce Reading Room, in Hawthorne-Longfellow Library, is in memory of Franklin Pierce, LL.D., of the Class of 1824, the fourteenth president of the United States. This informal reading room is at the east end of the second floor.

The William Curtis Pierce Library, on the second floor of the Visual Arts Center, was dedicated in honor of William Curtis Pierce, LL.B., LL.D., of the Class of 1928, in recognition of service to the College as an overseer, trustee, and supporter of the arts.

The Presidents' Gateway, erected in 1932, is a gift of the Class of 1907 in memory of William DeWitt Hyde, D.D., LL.D., president of the College from 1885 to 1917, and "as a mark of the enduring regard of all Bowdoin men for the leadership of their Presidents." The gateway forms one of the northern entrances to the campus from Bath Street.

The Franklin Clement Robinson Gateway, erected in 1923, is a memorial to Franklin Clement Robinson, LL.D., of the Class of 1873, for thirty-six years a teacher at Bowdoin College, and to his wife, Ella Maria Tucker Robinson. The gateway forms the northwestern entrance to the campus.

The Warren Eastman Robinson Gateway, erected in 1920 at the southwestern entrance to the campus, is a memorial to Lieutenant Warren Eastman Robinson, of the Class of 1910, who lost his life in the service of his country.

The Shumway Tree, a Rocky Mountain fir in memory of Sherman Nelson Shumway, A.M., LL.B., of the Class of 1917, generous benefactor and an overseer of the College (1927-1954), was replanted on the campus and dedicated in June 1955. It stands in front of Hawthorne-Longfellow Hall.

The Simpson Memorial Sound System, the gift of Scott Clement Ward Simpson, of the Class of 1903, and Mrs. Simpson, is dedicated to the memory of their parents. The system, including a high-fidelity record player and other teaching aids in music, was installed in Gibson Hall in 1954. A fund for its maintenance was established by Mr. and Mrs. Simpson in 1955.

The Thorndike Oak, standing near the center of the campus, is dedicated to the memory of George Thorndike, of the Class of 1806, who planted the tree in 1802 after the first chapel exercises.

The Turner Tree, a maple in memory of Perley Smith Turner, A.M., of the Class of 1919, professor of education at Bowdoin (1946-1956), was replanted on the campus east of Smith Auditorium by classmates and friends and dedicated in June 1957.

The Gerald Gardner Wilder Cataloguing Room, in Hawthorne-Longfellow Library, is a memorial to Gerald Gardner Wilder, A.M., of the Class of 1904, librarian of the College from 1916 to 1944. The room is in the southeast area on the first floor.

The Philip S. Wilder Room, on the third floor of Hawthorne-Longfellow Hall, is named in honor of Philip S. Wilder, of the Class of 1923, in recognition of more than fifty years of devoted service to the College.

The Frank Edward Woodruff Room, in Sills Hall, is a memorial to Frank Edward Woodruff, A.M., a member of the Bowdoin faculty from 1887 to 1922. The room was provided in 1951 through the generous bequest of Edith Salome Woodruff.

General Information

TERMS AND VACATIONS: The College holds two sessions each year, beginning in September and January. The dates of the semesters and the vacation periods are indicated in the College Calendar on pages v-vi.

The New England Association of Schools and Colleges: Bowdoin College is accredited by the New England Association of Schools and Colleges.

Registration and Enrollment: All students are required to register at the opening of each semester in accordance with schedules posted at the College and mailed to students registering for the first time. A fee of \$20 is assessed for late registration.

Statistics: As of June 1984, 25,179 students have matriculated at Bowdoin College, and 18,820 degrees in courses have been awarded. In addition, earned master's degrees have been awarded to 274 postgraduate students. Living alumni include 10,507 graduates, 2,047 nongraduates, 1 medical graduate, 95 honorary graduates, and 264 graduates in the specific post-graduate program.

Offices and Office Hours: The Admissions Office is located in Chamberlain Hall. General administration and business offices are located in Hawthorne-Longfellow Hall, the west end of the Nathaniel Hawthorne-Henry Wadsworth Longfellow Library. The Development and Alumni Relations offices are located at 85 Federal Street. The Office of Career Services is in the Moulton Union. The office of the college counselor is in the Dudley Coe Health Center. The Department of Physical Plant is in Rhodes Hall.

In general, the administrative offices of the College are open from 8:30 A.M. to 5:00 P.M., Monday through Friday. Summer hours are from 8:30 A.M. to 4:00 P.M.

Telephone Switchboard: The College has a central telephone switchboard located in the Moulton Union. All college phones are connected to this switchboard. The number is 207-725-8731.

College Charges 1984-85: The charges for tuition, room rent, board and fees** for the College year 1984-85 are as follows:

	By Semester		Total
	Fall	Spring	For the Year
Tuition	\$4,662.50	\$4,662.50	\$9,325.00
Board	947.50	947.50	1,895.00
Room Rent:			
Dormitories	740.00	740.00	1,480.00

Pine and Harpswell Street			
Apartments	1,020.00*	1,020.00*	2,040.00*
Other Apartments	847.50*	847.50*	1,695.00*
Student Activities Fee	45.00	45.00	90.00
Health Insurance	56.00	56.00	112.00

* When normal occupancy is varied, rates may change accordingly.

** The College charges do not include costs for travel, books or personal expenses; the student must budget for such items on his/her own.

For planning purposes, students and parents should anticipate that tuition and other charges may increase each year to reflect program changes and other cost increases experienced by the College.

College Bills: Statements and bills covering College charges will be sent to the student unless the Cashier has been requested *in writing* to direct them to someone other than the student. Semester statements will be sent to *every* student regardless of the payment option selected. Information about payment options is on pages 55-59.

Refunds: Refunds of tuition and fees for students leaving college during the course of a semester will be made in accordance with the following refund schedule:

During the first two weeks	80%
During the third week	60%
During the fourth week	40%
During the fifth week	20%
Over five weeks	No Refund

Refunds for board and room will be prorated on a daily basis in accordance with the student's attendance as it relates to the College's calendar, after adjustments for fixed commitments and applicable overhead expense. *Students who are dismissed from the College within the first five weeks for other than academic or medical reasons are not entitled to refunds.* Financial aid awards will be credited in proportion to educational expenses as stipulated in a student's award letter, but in no case will they exceed total charges to be collected. Application for a refund must be made in writing to the Cashier of the College within 30 days of the student's leaving.

Tuition: The tuition fee for the 1984-1985 academic year is \$4,662 each semester or \$9,325 for the year. There is a per-course charge of \$1,165 for special students taking fewer than three courses a semester. Students who wish to register for fewer than three courses in their final semester must request permission to do so before July 1. If a later request is approved, a \$225 surcharge will be added to the student's tuition bill in the appropriate semester. Any student completing the number of courses required for the degree in less than eight semesters must pay tuition for eight semesters, although

the Dean of the College is authorized to waive the requirements in such cases where the factors of advanced placement, junior year abroad, exchange or transfer status, or similar special circumstances exist. Work taken at other institutions to make up deficiencies in scholarship at Bowdoin or the accumulation of extra credits earned by taking more than four courses during a semester shall not relieve the student of the obligation to pay tuition covering eight full semesters at Bowdoin College.

There are opportunities at Bowdoin to receive financial aid in meeting the charge for tuition. Detailed information about scholarships, loans, and other financial aid may be found on pages 66-73.

Room and Board: Freshmen may indicate their housing needs on a preference card issued by the Dean of Students' Office. Accommodations and roommates are assigned by that office. Sophomores, juniors, and seniors choose roommates and apply for housing to the assistant to the Dean of Students. A \$100 deposit is required by March 15 of each year from all students, except entering freshmen, who wish to reserve a room for the next academic year.

Suites in the dormitories consist of a study and bedroom which are provided with essential furniture. Students should furnish blankets and pillows; the College furnishes bed linen and towels. College property is not to be removed from the building or from the room in which it belongs; occupants are held responsible for any damage to their rooms or furnishings.

The College owns a variety of apartments located near the campus. Rent for these apartments has been set at \$2,040 a student for Harpswell and Pine Street apartments and \$1,695 a student for all others for 1984-1985. Rent for dormitory rooms and rooms in a fraternity house is \$1,480.

Board is \$1,895 for the year. These charges are the same regardless of whether a student eats at the Moulton Union, Coles Tower, or a fraternity.

Students who live in Bowdoin facilities, except apartments, are required to take a full board plan. Partial board packages are available to students living off-campus or in College-owned apartments.

Other College Charges: All damage done to the buildings or other property of the College by persons unknown may be assessed equally on all undergraduates. The College collects in each academic year a student activity fee of \$90. The cost of tuition, board, room, and fees amounts to about \$6,395 for the semester. To these items must be added the cost of textbooks, personal expenses (including travel), and fraternity expenses if applicable.

A student participating in a study-away program that requires Bowdoin to administer tests or otherwise evaluate work done upon the student's return to the College is required to pay a charge of \$50 a semester course credit. This charge does not apply to the Twelve College Exchange or other accredited study-away programs.

Health Care: The facilities of the Dudley Coe Health Center (licensed

as a private general hospital) and the services of the college physician are available to all students. If ill, students should report to the health center.

To cover costs of treatment and care during the college year, in the infirmary or elsewhere, each student is required to have adequate health and accident insurance. This must be purchased through the College (the present group rate of \$56 per semester is subject to change), unless a student is covered otherwise by adequate health insurance certified by a parent or guardian at the time possible exemption from this requirement is requested. Students who purchase insurance through the College for either or both the fall and spring semester continue to be covered through the summer without additional charge.

Bills are rendered by the College for many medical services provided by the health center. Most of these costs are covered by the student health insurance available through the College. A pamphlet specifying the coverage provided by student health insurance is available from the Business Office. If parents choose not to purchase Bowdoin student health insurance, bills for services provided at the health center will be sent to the insurance carrier specified by parents. Any costs not covered by such family insurance will be charged to the student's account.

Motor Vehicles: All motor vehicles, including motorcycles and motor scooters, used on campus or owned and/or operated by residents of any College-owned residence or fraternity must be registered with the Dean of Students' Office. The registration fee is \$25 a year, one-half of which is payable each semester. Failure to register a motor vehicle will result in a fine of \$25. Students wishing to register a vehicle for a period of time less than one semester must make special arrangements with the Dean of Students. All students maintaining motor vehicles at the College are required to carry adequate liability insurance. Parking on Campus Drive is limited and students will be assigned parking areas according to their living locations.

PAYMENT OPTIONS

Students and their parents or guardians may pay the college charges as they fall due each semester or in accordance with Bowdoin's ten-month installment plan. They may also arrange to pay the total due by using a mixture of these two payment arrangements. There is also a plan to spread payments over a period of one to fourteen years.

The payment dates in the Bowdoin-sponsored payment plans cannot be deferred for the convenience of families using guaranteed student and parent loans, or other tuition payment programs. Both long and short term financial arrangements should be made far enough in advance to assure payment on the required dates. Special problems or emergency situations can be discussed with the Cashier at any time.

Students with unpaid bills may not register or attend classes, nor are they eligible for academic credit, semester grade reports, transcripts, or degrees.

Option I

Payment by Semester: About July 15 a bill will be sent for the tuition, board, room rent, and fees for the fall semester. Credits (funds actually received) and *tentative credits* (funds not yet received but expected to arrive) will also appear on the bill. Bowdoin scholarship grants, payments from the family, or any other cash payments are examples of credits. Non-Bowdoin scholarship aid that has been reported, payments arranged for under the Bowdoin Installment Payment Plan, etc., are examples of tentative credits. The balance due is the difference between all charges and all of the credits and tentative credits. The bill for the spring semester will be sent about December 15.

Late Payment Charge: The balance due each semester will be considered overdue if not paid within 15 days of the billing date, and any unpaid balance will be subject to a late charge of 12.5% per annum.

Option II

The Bowdoin Installment Payment Plan (IPP): The Bowdoin Installment Payment Plan spreads the charges for a full year over ten months, beginning July 1. This program is administered on behalf of the College by The Richard C. Knight Insurance Agency, Inc. of 53 Beacon Street, Boston, Massachusetts 02108.

Eligibility: Any parent or guardian of a Bowdoin undergraduate is eligible for this plan.

Application Deadline: Parents are urged to apply by June 15. Applications made after the start of the program (July 1) must be accompanied by an initial payment sufficient to become current with the regular payment schedule. Applications for the ten-month plan will not be accepted after August 15.

Amount to be Financed: The amount to be financed under IPP may not exceed the total net annual charges (total annual charges less scholarship and loans). If the amount to be financed is less than the net annual charges, the difference will appear as a balance due on the Bowdoin semester bill subject to the provisions of Option I. The minimum amount that can be financed is \$1,000.

Finance Charge: A *Finance Charge* will be applied at an *Annual Percentage Rate of 12.5%* beginning on *August 1, 1984*.

Schedule of Payments: The first of ten monthly payments will be due on

July 1, and subsequent payments will be due on the first day of each month thereafter until the entire unpaid interest and principal under IPP are paid.

Optional Payments: Additional optional payments over the basic schedule may be made at any time without penalty. The unearned finance charge will be rebated based on the actuarial method.

Application Fee: A \$25.00 non-refundable application fee must be submitted when returning the IPP application.

Consumer Credit Sales Contract: The parent and/or guardian must sign a Consumer Credit Sales Contract providing for the payment of scheduled installments.

Payment Coupons: Parents or guardian will receive a book of dated coupons to identify each payment. Each monthly payment with coupon should be sent to The Richard C. Knight Insurance Agency, Inc. (53 Beacon Street, Boston, Massachusetts 02108), which will handle the processing and accounting of the IPP for Bowdoin.

Interest Statements: Statements will be sent by the Knight Agency in January for the finance charges (interest) reportable on tax returns.

Delinquent Payments: In addition to the finance charge imposed under the IPP, a late charge of 5% of the monthly payment, or \$5.00, whichever is less, will be charged on any monthly payment in default for a period of 15 days or more.

Acceleration: If any payment is overdue by 30 days or more. Bowdoin shall have the right to declare the entire unpaid balance in the IPP account immediately due and payable. The acceptance of partial payments shall not be considered a waiver of any such default. Upon payment in full, the unearned finance charge, if any, will be rebated based on the actuarial method.

Insurance: Insurance coverage for IPP is optional and is offered independently of Bowdoin College by The Richard C. Knight Insurance Agency.

Option III

The Bowdoin College Student Loan Corporation has created an Extended Payment Plan (EPP) to help middle and upper-middle income families meet the substantial educational expenses for tuition, fees, room, and board. The plan allows families to structure payments for education over as little as one year or for as long as fourteen years, at a fixed, special rate of interest. Parents can select the amount they wish to borrow each year, and payments can be accelerated at any time, so parents can accommodate both the monthly amount and the length of their repayment schedule to their income, their

assets, or to other family circumstances. The EPP was designed specifically to provide for interest payments only on the amount borrowed while a student is attending Bowdoin. Equal installments of principal and interest do not begin until after the student leaves the College.

Eligibility: Loans are available to parents or guardians of Bowdoin degree candidates, as well as to Bowdoin students in certain circumstances, if combined annual incomes are less than \$100,000. The College will consider exceptions to this limit for families with more than one child in college at the same time or when there are unusual financial circumstances. Except for approved domestic or international exchange programs, students attending other institutions or taking leaves of absence are not eligible for parent loan support. Bowdoin will review the financial and credit information provided on the application prior to making the loan.

Amount of loan: Those eligible may borrow an amount between \$2,000 and \$10,000 a year. The loan cannot, however, exceed the total of regular college charges minus any financial aid, including any Guaranteed Student Loan, received by the student.

Disbursement: Ordinarily, one-half of the annual loan will be credited to the student's account of August 1 and January 1. When late applications for parent loans are approved after these dates, any late charges due and payable to Bowdoin College may still be required.

Repayment: The provisions of the program provide for monthly payments of *interest only* on the loans for a period of up to four years while the student is in college and level monthly payments of principal and interest thereafter over a period of ten years. Interest charged under the program is 11 $\frac{7}{8}$ % per annum. Prepayment of loans in part or in full is permissible without penalty except for any interest charges past due. The entire principal and interest may become immediately due and payable at the option of the Bowdoin College Student Loan Corporation if (1) prior to graduation, the student ceases to be enrolled at Bowdoin College or ceases to be enrolled in an academic curriculum approved by the College, or (2) any regular installment shall remain unpaid for more than sixty (60) days after its due date.

Agreement: A single Extended Payment Plan Disclosure Statement and Promissory Note will be executed for the total amount to be borrowed each year.

Insurance Protection: Optional insurance coverage for the loan is offered independently by the Richard C. Knight Insurance Agency. This insurance provides protection in the event of the borrower's death or total disability. The life insurance may cover all current and future payments contracted

for under the terms of the promissory note. In the event of a total disability, the insurance covers all monthly loan payments for as long as the borrower remains disabled.

Applications: Applications for loans are ordinarily due July 1 for fall disbursement or December 1 for spring disbursement. To receive a Bowdoin Extended Payment Plan application, please contact the Director of Student Aid, Bowdoin College, Brunswick, Maine 04011; telephone (207) 725-8731.

Admission to the College

IN January 1976 the Governing Boards of Bowdoin College approved the following statement on admissions:

Our need to be selective has inevitably required that attention be given to the principles of selection. We approve the current admission policy which seeks students who share the common characteristic of being seriously committed to the pursuit of a liberal arts education, but who, beyond that, have different interests, backgrounds and skills. The common denominator of intellectual commitment presupposes a candidate capable of not merely handling the academic program but of profiting from it and contributing to it. Beyond that common denominator, a candidate ought ideally to possess some particular skill or interest or to represent a culture, region or background that will contribute to the diversity of the college.

One can analyze the profile of Bowdoin's most recent class and make a rough prediction of a particular student's chances for admission to the next class. In recent years, Bowdoin has admitted approximately one of four candidates. Sixty percent of those admitted will have graduated from a public school, and three-quarters of this group will have ranked in the top 10 percent of their graduating class. Well over half of the independent school graduates will have been in the upper third of their class. Although Bowdoin does not require that a student seeking admission take a prescribed number of courses, the typical entering freshman will have had four years of English, foreign language, mathematics, and social science and three and a half years of laboratory sciences.

Candidates applying to Bowdoin College are evaluated individually by members of the admissions staff in terms of four general factors:

Academic Record: Bowdoin is particularly interested in the superior student who seeks out and has done well in a very demanding college preparatory curriculum. Particular emphasis is placed on academic performance in the junior and senior years of secondary school.

References: As standardized test scores are an optional admissions requirement, the recommendations of the candidate's college adviser, a current English teacher, and a peer, as well as a second recommendation of a student's choice, are important. Perceptions of the candidate's motivation, creativity, determination, and aptitude help the admissions staff sort out the very best from the very good.

Talent: Because of its small size and the variety of its academic and extra-

curricular offerings, the College is looking for a depth of talent and accomplishments in a few areas rather than surface involvement in many areas.

Class Composition: Rather than measure each individual candidate against fixed admissions standards, the College seeks a classfull of differences: students with different talents, of differing backgrounds, from different places, with different points of view. Intellectual commitment must be demonstrated by all admitted candidates, however.

APPLICATION AND ADMISSION PROCEDURES

Early Decision: Each year Bowdoin offers admission to approximately one-third of its entering class through its Early Decision program. Those candidates who are certain that Bowdoin is their first choice should seriously consider this option since it may resolve the problem of college admission early in the senior year. Bowdoin is in agreement with other colleges regarding the general ground rules, which are as follows:

1. When candidates file a formal application for admission, they must state in writing that they wish to be considered for Early Decision and that they will enroll if admitted. Early Decision candidates may file regular applications at other colleges, but only with the understanding that these will be withdrawn and no new applications will be initiated if they are accepted on an Early Decision basis by their first-choice college. In other words, only one Early Decision application can be made, but other regular applications may be initiated simultaneously.

2. The completed Personal Application form and formal request for Early Decision, a School Report form, a secondary school transcript of grades, an English Teacher Comments form, an additional teacher comments form, and a peer reference must be submitted to Bowdoin by November 15. Decisions on Early Decision applicants, whose applications are complete by November 15, will be announced by late December.

3. Candidates admitted via Early Decision who have financial need as established by the guidelines of the College Scholarship Service and based on the Financial Aid Form will be notified of the amount of their award at the time they receive their Early Decision acceptance, provided their financial aid forms are on file at Bowdoin. It is Bowdoin's policy to fund all needy students who are admitted via Early Decision.

4. The submission of College Entrance Examination Board or American College Testing scores at Bowdoin is optional as an admissions requirement. Applicants need not be deterred from applying for Early Decision because they have not completed the CEEB or ACT tests.

5. An Early Decision acceptance is contingent upon completion of the senior year in good standing.

6. Most candidates not accepted under the Early Decision program will automatically be transferred to the regular applicant pool. Failure to be ad-

mitted as an Early Decision candidate in no way prejudices one's chance for admission in the spring. Each year a number of applicants who are deferred under Early Decision are accepted in mid-April, when decisions on all regular admissions are announced.

7. Responsibility for understanding and complying with the ground rules of Early Decision rests with the candidate. Should an Early Decision candidate violate the provisions of the program, the College will reconsider its offer of admission (and financial aid if appropriate) to the candidate.

Regular Admission: The following items constitute a completed admissions folder:

1. The student's application form submitted with the application fee (\$30) as early as possible in the senior year. The deadline for receiving regular applications is *February 1*.

2. School Report: The college adviser's estimate of the candidate's character and accomplishments and a copy of the secondary school record should be returned to Bowdoin no later than February 1. A transcript of grades through the mid-year marking period (Mid-Year School Report) should be returned to Bowdoin by February 15. If a student matriculates at Bowdoin College, the School Report and secondary school transcript *will* become part of the permanent college file and will be available for the student's inspection.

3. Recommendations: Each candidate is required to submit the English Teacher Comments form, which should be given to the English teacher for completion and returned as soon as possible and no later than February 1. An additional teacher comments form may be submitted if a student feels that another opinion is necessary. Also, a close friend should complete the peer reference form on the candidate's behalf. If students have any outstanding strength, particularly academic, that they feel should be documented in their Bowdoin application, they should have their teacher, coach, or club adviser write to Bowdoin directly. If a student matriculates at Bowdoin College, required references *will* become part of the permanent college file.

4. College Board Examinations or American College Testing Scores: Applicants are not required to submit results of CEEB or ACT tests. A candidate's overall academic record will always be considered first, with motivation, discipline, personality, and sensitivity viewed as important factors. If submitted, the CEEB or ACT scores will probably be helpful to the Admissions and Student Aid Committee in reaching a decision, but will be treated as secondary in importance. The candidate is responsible for making arrangements to take the College Board examinations and to see that Bowdoin receives the scores if he or she wants them to be considered as part of his or her application. Should Bowdoin receive the scores on the secondary school transcript, these scores will be inked out before the folder is read by the Admissions and Student Aid Committee. Candidates may report their scores or instruct the College Board to send the scores to Bowdoin. Students choosing

to submit their SAT and Achievement Test scores should complete the entire battery of examinations no later than January of the senior year.

Bowdoin is particularly attracted to the student who seeks out and does well in a demanding college preparatory curriculum. Its policy regarding the CEEB or ACT test scores favors the student who is a superior achiever in the classroom but who may not fare so well on national standardized tests. Eighty-five percent of the public school graduates in the Class of 1987 ranked in the top 10 percent of their senior classes.

N.B.—Since standardized test results are used for academic counseling and placement, all entering freshmen are required to submit scores before matriculating.

5. Visit and Interview: A personal interview at Bowdoin with a member of the admissions staff or senior interviewer is strongly encouraged but not required. Distance alone sometimes makes it impossible for candidates to visit the College. The Bowdoin Alumni Schools and Interviewing Committees (BASIC) are available in most parts of the country to assist those applicants. For further information see page 000. Candidates' chances for admission are not diminished because of the lack of an interview, but many times the interview impressions prove helpful in reaching a decision. In the Bowdoin interview students should be prepared to talk informally about their academic record (an unofficial transcript is helpful), interests, talents, and goals. Ten carefully selected and trained Bowdoin seniors conduct interviews to supplement regular staff appointments from September to January.

The Admissions Office is open for interviews throughout the year except from February 1 to April 15 when the staff is involved in the final selection of the class.

6. Notification: All candidates will receive a final decision on their application for admission by mid-April. A commitment to enroll is not required of any candidate (except those applying for Early Decision) until the Candidates' Common Reply date of May 1. Upon accepting an offer of admission from Bowdoin a student is expected to include a \$200 admissions deposit, which is credited to the first semester's bill.

7. Candidates requiring an application fee waiver may petition for one through their guidance counselor.

Deferred Admission: Admitted students who wish to delay their matriculation to the College for one year in order to gain increased maturity and experience may request a deferment from the director of admissions. It is Bowdoin's policy to honor these requests and to hold a place in the next entering class for these students. A \$200 admissions deposit must accompany the deferral request.

Admission with Advanced Standing: Bowdoin participates in the CEEB Advanced Placement program and grants both advanced standing in courses

and credit toward graduation to qualified students. Examinations in Advanced Placement subjects are given by the CEEB in May of each year, and students are granted placement or credit on the basis of their examination performance. In most departments, a score of 3, 4, or 5 results in students' being given credit for one or two semesters of college-level work in the subject; if students elect to continue that subject in college, they are given appropriate placement. A judgment on an entering student's departmental placement will be made during the course registration period through personal conferences with appropriate faculty members.

Candidates not offering Advanced Placement examinations may secure advanced placement by passing a qualifying examination at the College. Bowdoin recognizes the place of more advanced courses in secondary school and provides an opportunity for unusually qualified students to extend the range of work that they may do in school and college. Occasionally, students may gain sufficient credit to enable them to complete their college course in fewer than eight semesters. Applicants are strongly encouraged to take advantage of the Advanced Placement program and should request consideration for Advanced Placement and credit by arranging for all Advanced Placement Test scores to be sent to the Admissions Office.

Transfer Students: A limited number of students from other colleges and universities will be admitted each year to upper-class standing at Bowdoin. The following information pertains to transfer candidates:

1. Candidates should file a transfer application by April 15, and must arrange to have submitted at the same time transcripts of their college and secondary school records, statements from deans or advisers at their colleges, and at least two recommendations from current or recent professors. As soon as it becomes available, an updated transcript including spring semester grades should also be sent. Candidates whose applications are complete will normally be notified of Bowdoin's decision by late May.

2. Transfer candidates should have academic records of honors quality ("B" work or better) in a course of study which approximates the work that would have been done at Bowdoin, had they entered as freshmen. Bowdoin accepts transfer credit for liberal arts courses in which a grade of "C" or higher has been received. Further, transfer students should understand that although they may expect an estimate regarding class standing upon transferring, official placement is possible only after updated transcripts have arrived at our Registrars' Office and have been appraised by the Dean of the College and appropriate department chairmen.

3. Candidates entering the junior year will be given preference. Two years of residence is required for a bachelor's degree from Bowdoin. Students who have completed more than four semesters of college work are not eligible to transfer. Candidates must present one full year of academic credit to be considered for transfer.

4. The funds available for transfer students are limited by commitments the College has already made to needy enrolled students and incoming freshmen. All transfers are eligible for aid, based on financial need. Applicants for aid must file a Financial Aid Form with the College Scholarship Service by April 1.

Special Students: Each semester, as space within the College and openings within courses permit, Bowdoin admits a few Special Students. In general, this program is intended to serve the special educational needs of residents of the Brunswick area. It is not a program for recent high school graduates who have not attended college or a program for students who have been enrolled in a college in the previous year. The tuition is \$450 for each course each semester. Inquiries should be addressed to the transfer coordinator. Normally, participation in the program is limited to two semesters.

PROCEDURE FOR APPLICATION FOR FINANCIAL AID

Bowdoin is one of more than 1,000 colleges that ask candidates for financial aid to file information through the College Scholarship Service, P.O. Box 2700, Princeton, New Jersey 08540, or P.O. Box 380, Berkeley, California 94701. This organization has been formed to simplify application procedures and to make decisions on awards as equitable as possible. Each applicant for financial aid must submit the Bowdoin Financial Aid Application (which is included with the Application for Admission) and must also obtain the Financial Aid Form (FAF) from his or her school and request the College Scholarship Service to forward a copy of this statement to Bowdoin. March 1 is the deadline for filing these applications (or December 1 for Early Decision applicants). Candidates should not be discouraged from applying to Bowdoin College for lack of funds. Because of its extensive scholarship grant and loan programs, Bowdoin's financial aid policy is to supplement family efforts so that as many students as possible can be admitted each year with the full amount of needed financial assistance. In 1983-1984, approximately 38 per cent of the entering class of 391 students received financial assistance. The amount of assistance intended to meet the individual's need is calculated from the information in the Financial Aid Form. The average award of grant and loan was about \$7,856. Additional material about the program of financial aid at Bowdoin may be found on pages 66-73. Awards of financial aid are announced with the letters of admission.

All correspondence concerning freshman and transfer admission to the College and scholarship aid should be addressed to the Director of Admissions, Bowdoin College, Brunswick, Maine 04011; telephone (207) 725-8731.

Scholarships, Loans, and Financial Aid

SCHOLARSHIP GRANTS, loans, and student employment are the principal sources of aid for Bowdoin students who need help in meeting the expenses of their education. Bowdoin believes that students who receive financial aid as an outright grant should also expect to earn a portion of their expenses and that they and their families should assume responsibility for repayment of some part of what has been advanced to help them complete their college course. Grants will total about \$2,800,000 in 1984-1985 and will be made to about 36 percent of the student body. All awards are made on the basis of satisfactory academic work and financial need, which is a requisite in every case. The financial aid program is coordinated by the director of student aid, to whom all applications, except those from students not yet enrolled in college, should be directed. Prospective freshmen should submit their applications to the director of admissions.

For the past several years, nearly \$300,000 has been lent annually to students. Long-term loans continue to be an integral part of financial aid, supplementing scholarship grants. On recommendation of the director of student aid, long-term loans may also be made to students not receiving scholarship grants. These loans, including Guaranteed Student Loans, National Direct Student Loans, and Bowdoin College Consolidated Loans, bear no interest during undergraduate residence. Interest is charged at 5% for the latter two loans; interest on Guaranteed Student Loans is set at 9% (8% for *new* borrowers beginning September 13, 1983). Payment over a ten-year period is called for beginning six months after graduation or separation; or after graduate school, two or three years of deferment for various categories of service or internships. National Direct Student Loans also provide for the waiver of some payments for persons who become teachers and/or who serve in the military. Small, short-term loans are available upon application at the Business Office.

The student employment program offers a wide variety of opportunities to undergraduates. These include direct employment by the College, employment by the fraternities, and employment by outside agencies represented on the campus or located in the community. Employment opportunities are open to all students who are interested, able, and willing to work. Commitments for employment are not made to freshmen until after the opening of college in the fall. The College participates in the Work-Study Program established under the Economic Opportunity Act of 1964, the Supplementary Educational Opportunity Grants Program established under the Higher Education Act of 1965, and the Pell Grant Program established under the Higher Education Amendments of 1972.

Prematriculation Scholarships: About 130 freshmen each year receive pre-matriculation awards to help them meet the expenses of their first year. Recently the range of awards has extended from \$500 to \$11,000. As noted above, some awards are direct grants, but most include the tender of loans. The size and nature of these awards depend upon the need demonstrated by the candidates. Applications should be made to the director of admissions by March 1 of each year. Candidates will be notified of a pre-matriculation award at the time they are informed of the decision on their applications for admission, usually about April 15.

The general basis for determining the amount of all pre-matriculation scholarships is the individual's financial need. Need is determined by an analysis of the statements of financial resources submitted to the Financial Aid Office on the aid forms.

Freshmen who hold pre-matriculation awards may be assured of continuing financial aid that meets their needs in the upper-class years if grades each semester are such as to assure progress required for continued enrollment (see General Regulations, Section 8, page 76). In each upper-class year the proportion of financial aid offered as a grant will be progressively decreased, and that offered as a loan increased, except in the case of certain scholarships where the full award must be made as an outright grant.

All awards of financial aid made in anticipation of an academic year, including the freshman year, will remain in effect for the full year unless the work of the holder is unsatisfactory. Awards for such students may be reduced or withdrawn for one semester. Awards may also be reduced or withdrawn for gross breach of conduct or discipline.

General Scholarships: Awards similar to pre-matriculation scholarships are granted to undergraduates already enrolled in college on the basis of their academic records and their financial need. Normally, these awards are made at the end of one academic year in anticipation of the next, but applications may be made in November for aid to be assigned during the spring semester on a funds-available basis. Awards made for a full year are subject to the same provisions covering pre-matriculation awards, but those made for a single semester are not considered as setting award levels for the following year.

Employment Assignments: So far as practicable, all college student jobs paying as much as \$200 a year will be assigned to students of recognized need.

Although most students must find their own jobs on campus, the student payroll for the past several years has exceeded \$400,000.

Graduate Scholarships: These awards are made to students who have completed their work at Bowdoin and are pursuing advanced study at other in-

stitutions. Application should be made in writing to the director of student aid. They are described on pages 68-70.

Graduate Scholarships

ARTS AND SCIENCES

Charles Carroll Everett Scholarship: A fund of \$24,526 bequeathed by Mildred Everett in memory of her father, Charles Carroll Everett, D.D., of the Class of 1850, the net income of which is given to that graduate of Bowdoin College whom the president and faculty shall deem the best qualified to take a postgraduate course in either this or some other country. (1904)

Timothy and Linn Hayes Scholarship Fund: A fund of \$10,860 given by Timothy and Linn Hayes for support of postgraduate or undergraduate studies in the social sciences, i.e., those branches of knowledge which deal with the institutions and functioning of human society and with the interpersonal relationships of individuals as members of society. (1970)

Guy Charles Howard Scholarship: A fund of \$32,165 bequeathed to the College by Ethel L. Howard in memory of her brother, Guy Charles Howard, of the Class of 1898, the income of which is to be used to enable "some qualified student to take a postgraduate course in this or some other country, such student to be designated by the Faculty." (1958)

Henry W. Longfellow Graduate Scholarship: A fund of \$17,784 given by the daughters of Henry W. Longfellow, of the Class of 1825—Alice M. Longfellow, Edith L. Dana, and Annie L. Thorpe—for a graduate scholarship "that would enable a student, after graduation, to pursue graduate work in some other college, or abroad if considered desirable; the work to be done in English, or general literature, and the field to be as large as possible—Belles Lettres in a wide sense. The student to be selected should be one not merely proficient in some specialty, or with high marks, but with real ability in the subject and capable of profiting by the advanced work, and developing in the best way." (1907)

The Wilmot Brookings Mitchell Graduate Scholarship: An award from a fund of \$58,155 established by Hugh A. Mitchell, of the Class of 1919, "to honor the memory of my father and his love for Bowdoin." Professor Mitchell was a member of the Class of 1890 and from 1893 to 1939 Edward Little Professor of Rhetoric and Oratory. The award is made by the president upon recommendation of a committee composed of the three senior professors of the Department of English "to a member of each graduating class who has majored in English and intends to teach English, the winning candidate to

be selected on the basis of character as well as superior ability and talent for teaching." The award is to be used to help defray the costs of graduate work in a leading university in this country or England. (1965)

Galen C. Moses Postgraduate Scholarship: A fund of \$8,916 bequeathed by Emma H. Moses in memory of her husband, a member of the Class of 1856, the income to be awarded and paid to the student most proficient in any natural science during his or her undergraduate course, who shall actually pursue a postgraduate course in such science at any recognized college or university; said income to be paid to such student for a period not exceeding three years, unless he or she sooner completes or abandons said postgraduate course. (1934)

O'Brien Graduate Scholarship: A fund of \$35,052 given by Mrs. John Washburn, of Minneapolis, in memory of her uncles, John, William, Jeremiah, and Joseph O'Brien, for a "scholarship, preferably a graduate scholarship, for a student, or students, to be selected annually by the Faculty, who shall be deemed most suitable to profit by travel or advanced study, either in this country or abroad." (1937)

Nathan Webb Research Scholarship in English or English Literature: A fund of \$47,649 bequeathed to the College by Dr. Latham True in memory of his wife's father, the Honorable Nathan Webb, LL.D., the income to be used to support a scholarship of \$1,200 annually. The recipient must have received an A.B. from Bowdoin, preferably be unmarried, and use the scholarship in the study toward a Ph.D. "If deemed advisable, the said scholarship may be awarded to the same student for two or three years in succession, but no longer." (1963)

LAW AND MEDICINE

Garcelon and Merritt Fund: About \$31,500 from the income of this fund, established in memory of Seward Garcelon, of the Medical Class of 1830, and Samuel Merritt, of the Medical Class of 1843, is appropriated annually for medical scholarships. The larger part of the amount is awarded to students pursuing their studies in medical schools, and the remainder may be assigned to students in the College who are taking premedical courses; but, at the discretion of the Board of Trustees, all of the income available may be assigned to students in medical schools.

Awards are made only to worthy and struggling young students "in need of pecuniary aid," and preference is given to graduates and former students of Bowdoin College. Applications from those not graduates or former students of Bowdoin College, but who are residents of the State of Maine, may be considered after they have completed one year in medical school. (1892)

George and Mary Knox Scholarship Trust: A fund created under the will

of George B. Knox, of the Class of 1929, for scholarships to be used for Bowdoin graduates attending Harvard Business, Law, and Medical Schools. (1984)

Lee G. Paul Scholarship: A fund of \$74,663 given by Lee G. Paul, of the Class of 1929, the income to be used to provide financial assistance to graduates attending the Harvard University School of Law and requiring financial aid.

To qualify for a scholarship award from this fund a student must have been admitted to the College only after meeting all requirements for admission applicable to all candidates for admission and must have met during his undergraduate years at the College at least the minimum standards of performance expected of all students.

There is to be no discrimination either in favor of or against any student because of race, color, creed, sex, or disadvantaged background in the award of scholarships from this fund. (1964)

Robinson-Davis Fund: A fund of \$238,594 given in trust under the will of Beatrice R. Davis in memory of Frank W. Robinson and Dr. Horace A. Davis, the income to be used to provide graduate scholarships for students, preferably natives and residents of Maine. Forty percent of the income is to be used for those who intend to study and practice law. The balance is for those who intend to study and practice medicine. (1972)

Earl Kendall Van Swearingen Scholarship Fund: A fund of \$213,345 established by the bequest of Eleanore Maria Van Swearingen, the income to be used to support a "scholarship or scholarships to be awarded to the best pre-medical students for their medical education." (1969)

Other Student Aid Funds

LOAN FUNDS

The following loan funds were established to assist students in unexpected circumstances to continue their college courses.

John M. Braciulis-Bachulus Student Loan Fund (1984) \$41,391

Given by John M. Bachulus, M.D. of the Class of 1922.

Preference for loans to students of Baltic descent.

Bowdoin Family Association Loan-Scholarship Fund (1973) 10,205

Given by the Bowdoin Family Association.

Financial assistance with first preference for loans and second for scholarships.

Scholarships, Loans, and Financial Aid

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Bowdoin Loan Fund (1959)	398,631
College appropriation.	
Cummings Loan Fund (1943)	3,296
Given by George O. Cummings 1913.	
Administered by the deans.	
George Osgood Cutter Fund (1984)	699
Given by George Osgood Cutter of the Class of 1927 along with gifts from friends and family in his memory.	
Davenport Loan and Trust Fund (1908)	15,369
Given by George P. Davenport 1867.	
George P. Davenport Student Loan Fund (1959)	4,304
Given by the Trustees of the Davenport Fund.	
Residents of the State of Maine, preferably graduates of Morse High School, Bath.	
Stanley F. and Valrosa V. Dole Loan Fund (1984)	35,975
Given by the estate of Stanley F. and Valrosa V. Dole.	
Harry Fabyan Students' Aid Fund (1966)	5,367
Given by Mrs. Harry C. Fabyan.	
Administered by the president of the College.	
Guy P. Gannett Loan Fund (1941)	19,755
Given by an anonymous donor.	
Augustus T. Hatch Loan Fund (1958)	5,726
Given by the Davenport-Hatch Foundation, Inc.	
Albion Howe Memorial Loan Fund (1903)	5,600
Given by Lucien Howe 1870.	
Edward P. Hutchinson Loan Fund (1940)	14,748
Given by Edward P. Hutchinson 1927.	
Administered by the deans.	
William DeWitt Hyde and Kenneth C. M. Sills Loan Fund (1964)	29,608
Established by Fred R. Lord 1911.	
Administered by the president and dean of the College.	
For undergraduates, instructors, and assistant professors.	
Arthur Stephen Libby Memorial Fund (1949)	1,748
Given by Mrs. Arthur S. Libby.	
Wendy McKnight Student Loan Fund (1972)	1,917
Given by family and friends.	
Cecil C. and T. Virginia McLaughlin Fund (1984)	49,980
Given by the estate of Cecil C. and T. Virginia McLaughlin.	

Charles W. Marston Loan Fund (1960)	5,737
Given by Mrs. Charles W. Marston.	
Meddiebempsters Loan Fund (1950)	804
Given by "The Meddiebempsters."	
Carleton P. Merrill Loan Fund (1963)	10,740
Given by Ella P. Merrill.	
New England Society Loan Fund (1947)	3,708
Given by the New England Society in the City of New York.	
Paul K. Niven, Sr., Student Loan Fund (1974)	53,063
Given by Paul K. Niven, Sr. 1916.	
Jessie Smith Noyes Foundation Fund (1972)	20,503
Given by Jessie Smith Noyes Foundation, Inc.	
President's Loan Fund (1909)	24,789
Given by various donors.	
Alfred P. Sloan Foundation Loan Fund (1960)	15,729
Given by the Alfred P. Sloan Foundation, Inc.	
George Alston Tripp Student Loan Fund (1979)	7,494
Given by Robert H. Tripp 1928.	

MISCELLANEOUS

Harold Hitz Burton Student Book Fund: A fund of \$22,532 given in honor and memory of the late Honorable Harold Hitz Burton, LL.D., of the Class of 1909, by members of the Bowdoin Club of Washington and others to assist needy Bowdoin undergraduates in the purchase of books required in their courses. Administered by the Dean of Students. (1967)

Computer Loan Fund: A loan fund of \$50,000 established to enable members of the faculty and administrative staff to purchase computer equipment for professional and personal use. The fund is administered by a committee comprising the treasurer, the Dean of the College, and the chairman of the faculty computing center committee. (1984)

Davis Fund: A fund of \$3,131 established by Walter G. Davis to encourage undergraduate interest in international affairs. Administered in such manner as the president of the College may direct. (1934)

Mason-Le Cannellier Fund: A fund of \$6,706 established in honor of William R. Mason and Jean and Monique Le Cannellier "for the purpose of providing loans and/or grants to admitted, nonmatriculated freshmen students (with preference to those of middle-income families) to facilitate travel

or the pursuit of an alternative non-academic experience for a few months or a year before the students commence studies at Bowdoin." Awards are made at the discretion of the Director of Admissions. (1982)

Dean Paul Nixon Discretionary Fund: A fund of \$41,311 established by E. Jeffrey Gilman of the Class of 1940, and his wife, Barbara Drummond Gilman, in honor and memory of Paul Nixon, who joined the faculty of Bowdoin in 1909 and served as Dean of the College from 1918 to 1947. The fund is administered by the Dean of the College, "with an award to be made whenever the Dean of the College feels that a student deserves encouragement and a 'pat on the back'—not necessarily for a great action but for any of those moments which call for a 'pat on the back.'" (1981)

John L. Roberts Fund: A fund of \$31,516 given by John L. Roberts, of the Class of 1911, to assist some underprivileged scholar, other than a teacher or one contemplating teaching, to do research in any field he may choose. (1958)

Richard White Foundation Fund of Bowdoin College: A fund of \$1,618 established by the Richard White Foundation to provide food and recreation at Thanksgiving and Christmas to the "two members of the freshman class most in economic need." (1978)

Bowdoin College issues a separate publication honoring those in whose names scholarships and book funds have been donated.

The Curriculum

BOWDOIN does not prescribe specific liberal arts courses for all students. Instead, each student determines, with the help and approval of an academic adviser, an appropriate pattern of courses. To ensure that students explore the breadth of the curriculum before settling upon a major, they are expected to complete two courses each in natural science and mathematics, social and behavioral science, humanities and fine arts, and foreign studies. Courses, it is assumed, do not lead simply to other courses in the same subject. Properly taught, they should raise questions and evoke a curiosity that other disciplines must satisfy. The College also recognizes through its course offerings the importance of relating a liberal education to a society whose problems and needs are continually changing.

The breadth of a liberal arts education is supposed to distinguish it from professional training, and its depth in one field, from dilettantism, although in fact it shares qualities of both. Bowdoin encourages the student to extend his or her concerns and awareness beyond the personal. At the same time the College helps a student to integrate curricular choices in accordance with individual intellectual needs. Interaction between the student and an academic adviser is a vital part of this educational experience.

REQUIREMENTS FOR THE DEGREE

To qualify for the bachelor of arts degree, a student must have:

1. successfully passed thirty-two courses;
2. completed a departmental major or majors, an interdisciplinary major, or a student-designed major (a departmental minor may be completed with any of the preceding);
3. spent four semesters (passing at least sixteen courses) in residence, at least two of which (eight courses) will have been during the junior and senior years;
4. completed at least two semester courses in each of the following divisions of the curriculum: natural science and mathematics, social and behavioral sciences, humanities and fine arts; and two semester courses in foreign studies.

GENERAL REGULATIONS

1. **Course Load:** Students are required to take the equivalent of four full courses each semester. Students wishing to take more than *five* courses must have permission of the Deans' Office. A student may not take five courses in the semester following the receipt of an "F" without the Dean's

approval. Juniors or seniors who have accumulated extra credits may apply to the Deans' Office for permission to carry a three-course load once during their last four semesters at Bowdoin. In addition, students entering their final semester with extra credits from Advanced Placement tests, study away, or summer school may request a reduced load of one or two courses. No extra tuition charge is levied upon students who register for more than four courses and, by the same token, no reduction in tuition is granted to students who choose to register for three courses.

2. Course Examinations: The regular examinations of the College are held at the close of each semester. An absence from an examination entails the mark of zero. In the event of illness or other unavoidable cause of absence from examination, the Deans' Office may authorize makeup of the examination.

3. Course Grades: Course grades are High Honors, Honors, Pass, Credit, and Fail. High Honors indicates excellent work. Honors indicates good work. Pass indicates satisfactory work. Credit indicates passing work, without further distinction as to quality, in a course elected by a student to be graded on a Credit/Fail basis. Fail indicates unsatisfactory work. In independent study courses that will continue beyond one semester, instructors shall have the option of submitting at the end of each semester except the last a grade of "S" for Satisfactory in place of a regular grade. A regular grade shall be submitted at the end of the final semester and shall become the grade for the previous semesters of independent study.

4. Incompletes: With the approval of the dean, a grade of Incomplete may be recorded in any course for extenuating circumstances such as family emergency, illness, etc. At the time an Incomplete is agreed upon by the dean and the instructor, a date shall be set by which all unfinished work must be turned in by the student to the instructor. Ordinarily, this will be no later than the end of the second week of classes of the following semester. The instructor must submit a final grade within two weeks of this date. If the course work is not completed within the specified time limit, the Incomplete will be changed to Fail. Any exceptions to this rule or a change of the specified time limit will require approval of the Recording Committee.

5. Credit/Fail Option: A student may elect to enroll in a limited number of courses on a Credit/Fail basis. Graduation credit is given for courses in which a grade of Credit is received. A student may elect no more than one course of the normal four-course load each semester on a Credit/Fail basis and no more than four such courses during the undergraduate career. However, a student may elect a fifth course any semester on a Credit/Fail basis. No course may be changed from graded to Credit/Fail or vice versa after the first week of classes.

6. Grade Reports: A report of the grades of each student is sent to the student at the close of each semester.

7. The Dean's List: Students who receive grades of Honors or High Honors in all regularly graded courses and Credit in all other courses for a semester are placed on the Dean's List.

8. Deficiency in Scholarship: Students are expected to make normal progress toward the degree. Normal progress is defined as passing four full-credit courses each semester. Students may not matriculate in a fall semester if they are more than two course credits short of normal progress. Students who fail to meet this matriculation standard may enroll after a suspension of one semester with approval of the Dean.

The records of students who fail more than one course are reviewed by the Recording Committee at the end of each semester. Students who fail three or more courses at the end of the first semester of the freshman year or who fail two or more courses at the end of any other semester are normally dismissed from the College. Students for whom dismissal is waived must take and pass four courses the following semester. Their records will be reviewed by the Recording Committee at the end of that semester.

Students who have been dismissed may apply for readmission after an absence of one semester. An application for readmission consists of a letter from the student stating why the student considers himself or herself ready to resume college work successfully together with two letters of recommendation from persons who have known the student during the time away from Bowdoin, commenting on the student's readiness to resume college work.

A student is dismissed permanently from the College if he or she is subject to dismissal a second time for failures in two or more courses.

9. Maximum Residency: No student will ordinarily be permitted to remain at Bowdoin for more than nine semesters of full-time work.

10. Senior Course Selection: A student may be required to take a course in his or her major department in each semester of the senior year at the department's discretion.

11. Leave of Absence: A student in good standing may, with the approval of his or her adviser, apply to the Recording Committee for a leave of absence for nonacademic pursuits for one or two semesters. The leave must begin at the end of a regular semester. A student on approved leave is eligible for financial aid upon his or her return. A student wishing to apply for a leave of absence for one or both semesters of an academic year must submit an application by April 1 of the previous academic year. Applications for leave of absence submitted during the fall semester requesting a leave for the next spring semester will be considered only in the most urgent circumstances. Academic credit may not be transferred to Bowdoin for courses taken while on leave.

ADVISING SYSTEM

Each student is assigned an academic adviser at the start of the freshman year. Whenever possible, the adviser is from a field of study in which the stu-

dent has shown some interest. Advisers and students meet during orientation before the start of fall semester classes and on a systematic basis thereafter.

At registration the student chooses courses and asks the adviser to approve the selection by signing the registration card. Should a student and adviser find themselves in disagreement over the wisdom of the selection, a subcommittee of the Recording Committee acts as arbiter.

Students elect a major during the second semester of the sophomore year. After registering for a major, a student is advised by a member of his major department.

COMPOSITION

The importance of good writing to a student's success in college is obvious. Students are encouraged to enroll in one of the freshman seminars in which composition is taught (**English 1, Seminars 1-6; English 2, Seminars 1-6**). Students with serious writing problems are identified by the Deans' Office and are advised to enter a special tutorial program.

DISTRIBUTION REQUIREMENTS

Students must complete at least two courses in each of the three divisions of the curriculum and two courses in foreign studies, normally by the end of the sophomore year. A course which counts for one distribution area may not count for another. Because these requirements are intended to apply to the college liberal arts experience, they may not be met by advanced placement credits but can be met, under the supervision of the Recording Committee, by credits earned while studying away from Bowdoin. Areas of distribution are defined as follows:

Natural Science and Mathematics: Biology, chemistry, computer science and information studies, environmental studies, geology, mathematics, and physics.

Social and Behavioral Sciences: Afro-American studies, economics, government, psychology, and sociology and anthropology.

Humanities and Fine Arts: Art, classics, education, English, German, history, music, philosophy, religion, Romance languages, and Russian.

Foreign Studies: The requirement is intended to introduce students to cultures fundamentally different from their own. Courses in many departments may satisfy the requirement; such courses are indicated by a dagger (†) on pages 87-196 in the catalogue. Approved courses focus on one or several aspects of a non-English-speaking culture but satisfy the requirement only if those elements are treated as integral parts of a culture, rather than as isolated illustrations or examples of a particular discipline or theory. All courses in a foreign language are regarded as dealing with an integral part of a culture and meet the requirement, provided that two semesters of study in a single language are completed.

THE MAJOR PROGRAM

Students may choose one of five basic patterns to satisfy the major requirement at Bowdoin: a departmental major, two departmental majors, an interdisciplinary major, a student-designed major; a departmental minor may be completed with any of the preceding. Each student must choose a major by the end of the sophomore year after consultation with the department or departments involved. No student may major in a department unless the department is satisfied that the student is able to do work of at least passing quality in its courses. Seniors may add or change majors and/or minors until the end of the first semester of their senior year. Changes by seniors in interdisciplinary or self-designed majors require the approval of the Recording Committee. A student who has not been accepted in a major department cannot continue registration.

Options for major programs are described below.

Departmental Majors

All departments authorized by the faculty to offer majors specify the requirements for the major in the catalogue. A student may choose to satisfy the requirements of one department (single major) or to satisfy all of the requirements set by two departments (double major). A student may drop a second departmental major by notifying both the registrar and the department concerned at any time.

Interdisciplinary Major

As the intellectual interests of students and faculty alike have reached across departmental lines, there has been a growing tendency to develop interdisciplinary majors. Interdisciplinary majors are designed to tie together the offerings and major requirements of two separate departments by focusing on a theme which integrates the interests of those two departments. Such majors usually fulfill most or all of the requirements of two separate departments and usually entail a special project to achieve a synthesis of the disciplines involved.

Anticipating that many students will be interested in certain patterns of interdisciplinary majors, several departments have specified standard requirements for interdisciplinary majors. For descriptions of these interdisciplinary majors see pages 147-148.

A student may take the initiative to develop an interdisciplinary major by consulting with the chairmen of the two major departments. A student may not select an interdisciplinary major after the end of the junior year.

Student-Designed Major

In some cases, a student may wish to pursue a major program which does not fit either of the patterns described above. The faculty has authorized a pattern which permits a student working together with two faculty members to develop a major program which may draw on the offerings of more than two departments. Guidelines for the development of student-designed majors are available from the Deans' Office. No student may apply for a student-designed major after the end of the sophomore year.

Departmental Major and Departmental Minor

Students may fulfill the major requirements of one department and meet the minor requirements of any other department or program, subject to the approval of that department or program.

The Minor

All major and minor departments and some programs offer a minor program consisting of no fewer than four courses and no more than seven courses including all prerequisites. A minor program must be planned with and approved by the student's major department, and approved by the student's minor department. A minor may be dropped at any time by notifying both the registrar and the department or program concerned, but may not be added after the end of the first semester of the senior year.

INDEPENDENT STUDY

With departmental approval, a student may elect a course of independent study under tutorial supervision. (Freshmen and sophomores require the approval of the Dean as well.) In most departments the project will consist of a written dissertation or an appropriate account of an original investigation, but projects in music, the fine arts, and letters are also encouraged. *Students who seek departmental honors are expected to register for at least one course in independent study and to achieve an honor grade in it. Independent study may not be taken on a credit/fail basis.*

A department will ordinarily approve one or two semesters of independent study for which regular course credit will be given. A definite plan for the project must be presented by the student, approved by the department, and filed in the Dean of the College's office. The plan must be submitted with the course registration card by the end of the first week of classes. Where more than one semester's credit is sought, the project will be subject to review by the department at the end of the first semester. In special cases, the Recording Committee, upon recommendation of the department, may extend credit for additional semester courses beyond two. In independent study

courses that will continue beyond one semester, instructors shall have the option of submitting at the end of each semester except the last a grade of "S" for Satisfactory in place of a regular grade. A regular grade shall be submitted at the end of the final semester and shall become the grade for the previous semesters of independent study. The final corrected copy of the project must be submitted to the department before the last day of classes of the final semester of the work. Normally, the evaluation of an independent study project should be made by two faculty members. *For administrative purposes, this independent study will bear one or more of the course numbers 201, 202, 203, 204, depending upon the number of course credits allowed.*

THE AWARD OF HONORS

Departmental Honors

The degree with *honors*, *high honors*, or *highest honors* in a major subject is awarded to students who have distinguished themselves in that subject. The award is made by the faculty upon recommendation of the department. It is based upon honor grades in at least a majority of major courses, honor grades in any departmental special major requirements, and honor grades in independent study in the major department.

All written work in independent study accepted as fulfilling honors requirements shall be deposited in the library in a form specified by the Library Committee.

General Honors

General Honors are awarded on the basis of a student's final six semesters at Bowdoin, except that a student who receives a Failure in any course at Bowdoin or in any course at an institution from which academic credit is being transferred to Bowdoin is not eligible for General Honors. No student who has studied at Bowdoin for fewer than six semesters is eligible.

A degree *cum laude* shall be awarded to a student who receives at least 75 percent Honors or High Honors. Within the honor grades, there must be two High Honors for each Pass.

To receive a degree *magna cum laude* a student shall fulfill the requirement for a degree *cum laude*, with the additional stipulation that at least 30 percent of the student's grades must be High Honors exclusive of the High Honors balancing the Passes.

A degree *summa cum laude* shall be awarded to a student who receives at least 70 percent High Honors and the balance Honors.

SPECIAL PROGRAMS

Afro-American Studies

A program in Afro-American studies offers students opportunities to explore and to analyze the social environment and issues of people of African

descent. The concentration of the program is directed towards areas of the diaspora—the United States, the Caribbean, South America, and Africa—in order to present a complete pan-Africana perspective.

This is an interdisciplinary program and draws on courses from the humanities and social sciences. For a description of the curriculum, see pages 87-89.

Architectural Studies

Although the college offers no special curriculum leading to graduate study in architecture, students interested in a career in this field should consult with members of the Visual Arts Division of the Department of Art as early as possible. In general, students should develop the ability to conceive and to articulate visual ideas through drawing. Recommended courses may be found on page 95.

Biochemistry

For a detailed description of this interdisciplinary program, see page 97.

Environmental Studies

A premise which underlies the philosophy of the Environmental Studies Program at Bowdoin is that the vast majority of the people active in environmental work use either the general skills acquired in a liberal arts education or the specialized training gained in the graduate study of analytical chemistry, oceanography, environmental law, economics, urban planning, and many other fields. Consequently, basic to the coordinate major program in environmental studies is the completion of a major in a discipline of each student's choosing. In addition, the program tries to achieve two objectives for its majors and other interested students: (a) to indicate the scope of selected contemporary environmental issues and (b) to integrate appropriate information from a range of disciplines.

Bowdoin does not offer courses which prepare students to enter many of the specialized planning and management fields directly after graduation. On the other hand, the coordinate major can serve as an excellent basis for graduate study in these specialized fields (forestry, wildlife management, waste treatment engineering, etc.).

The Environmental Studies Program has the flexibility to meet a range of individual needs. Students interested in this area are encouraged to consult at an early point with the director of environmental studies in order to plan an appropriate program. For a description of the program, see pages 124-125.

Freshman Seminars

The purpose of the freshman seminar is to introduce the academic discipline in which the seminar is offered and, in a broader sense, to contribute

to a student's understanding of the ways in which a specific discipline may relate to other areas in the humanities, social sciences, and sciences. A major emphasis of each seminar will be placed upon the improvement of the student's individual skills—his or her ability to read texts effectively, to write prose that is carefully organized, concise, and firmly based upon evidence.

Each year a number of departments offer freshman seminars. Enrollment in each is limited to sixteen students. Sufficient seminars are offered to ensure that every freshman will have the opportunity to participate during at least one semester of the freshman year. Registration for the seminars will take place before registration for other courses, to facilitate scheduling.

Seminars to be offered in 1984-1985 are listed below and are described under the appropriate departments:

<i>Fall</i>	<i>Spring</i>
Art 3, Seminar 1	Art 3, Seminar 2
English 1, Seminars 1-6	English 2, Seminars 1-6
History 3, Seminar 1	History 3, Seminar 2
Music 7	Philosophy 1, Seminar 6
Philosophy 1, Seminars 2 and 5	
Religion 2, Seminars 1 and 2	

Health Professions

Students contemplating the study of medicine, dentistry, or one of the other health professions are advised to discuss their undergraduate course with the adviser for the health professions, Dr. Roy E. Weymouth, Jr., College Physician. A meeting of students interested in the health professions is held at the opening of college each fall. Other meetings intended to be of help and interest to prehealth professional students are announced during the year.

Independent Language Study

For a detailed description of this program, see page 147.

Intercollegiate Center for Classical Studies in Rome

The Intercollegiate Center for Classical Studies in Rome, established in 1965, provides undergraduates with an opportunity to study Greek and Latin literature, ancient history and archaeology, and ancient art. Students must take four courses, but may take a fifth. The center operates two semesters each academic year. Further information about the program may be obtained from Erik O. Nielsen, associate professor of archaeology in the Department of Classics.

Intercollegiate Sri Lanka Educational Program (ISLE Program)

Bowdoin and five other private liberal arts colleges (Bates, Carleton, Colby, Hobart and William Smith, and Swarthmore) have organized a fall semester study program in Sri Lanka to facilitate a rigorous and authentic intellectual and cultural experience for mature, motivated students with a demonstrated interest in South Asian studies, especially religion. All students in good academic standing are eligible to apply for the program. Preference is given to those students with a record of high achievement in courses focused upon Asian religions, history, philosophy, art, political science, sociology, and anthropology. Four to six Bowdoin students may participate each year, and four course credits are normally awarded. Interested students should consult with John C. Holt of the Department of Religion, or with Dean of the College Robert C. Wilhelm.

Legal Studies

Students considering the study of law should consult with Barbara S. Babkirk, Office of Career Services. Other members of the Legal Studies Advisory Group are Craig A. McEwen, Department of Sociology and Anthropology; Richard E. Morgan and Allen L. Springer, Department of Government and Legal Studies; and George S. Isaacson, Esq. They can advise students on the best ways to obtain coherence between a liberal arts program and the study of law and allied fields.

Bowdoin participates with Columbia University in an accelerated interdisciplinary program in legal education. Under the terms of this program, Bowdoin students may apply to begin the study of law after three years at Bowdoin. Students who successfully complete the requirements for the J.D. at Columbia also receive an A.B. from Bowdoin.

Murlo Summer Program

The Murlo Summer Program is designed to introduce interested students to both the practical and theoretical aspects of Etruscan archaeology. The seven-week program of fieldwork is carried out during the summer near Siena, Italy, at the Etruscan site of Poggio Civitate (ca. 650 B.C.). American students participate in the actual excavation of the material as well as in the documentation and conservation carried out in the storerooms. The work is conducted under the supervision of a professional staff of archaeologists, conservators, an architect, an illustrator, and a photographer.

On completion of the program, students may apply to the Recording Committee for one course credit, which will be considered on an individual basis.

Off-Campus Study

Bowdoin offers its students the opportunity to participate in a variety of programs sponsored by other institutions and organizations. Study away

must be approved by the College's Recording Committee and the student's major department; requests must be submitted to the Dean of the College prior to the Friday before spring vacation of the year preceding attendance. Many specific programs and requirements for participation in them have been approved (see page 85 for information on Twelve College Exchange).

Foreign study: Students may apply for study in virtually any country. The Deans' Office has a list of approximately 80 programs which have been approved; students should consider these first. Information, including student evaluations, is also available from the Deans' Office. Students interested in the program of the Institute for European Studies should consult with the registrar. Bowdoin has an exchange program with the University of Dundee in Scotland.

Students who wish to study in French-, Spanish-, German-, or Russian-speaking countries must have completed two years of language study or its equivalent. Some language study is encouraged for programs in countries with primary languages other than those but is not required. Deadlines for application to foreign programs vary; a student should consult with the dean well before the spring vacation of the year preceding anticipated participation.

Domestic study: Study at other institutions in the United States should be considered primarily as an extension of Bowdoin's academic program. Therefore, a student's academic motivation is the essential criterion for approval. Bowdoin has a number of defined exchange programs; to attend any institution not currently approved, a student must, after consultation with his or her adviser, present evidence that the study requested will be undertaken in at least a comparable academic environment. It is the student's responsibility to apply to Bowdoin and to the other institution for acceptance.

Approved programs include the City Semester at Boston University, Williams College—Mystic Seaport Program, the National Theater Institute, Washington Semester at American University, Tougaloo College, Sea Semester at Woods Hole, and the Twelve College Exchange (see page 85). Forms for and information about these programs are available in the Deans' Office.

In all off-campus study programs, credit will be transferred only for grades of "C-minus" or better, and an official transcript must be submitted to Bowdoin's registrar. Costs, if any, are defined on page 54.

Preengineering Programs

Through an arrangement with the School of Engineering and Applied Science of Columbia University and with the California Institute of Technology, qualified students may transfer into the third year of an engineering option after completing three years at Bowdoin. Admission is assured with the recommendation of the coordinator of the 3-2 programs. Then after the completion of two full years at the engineering school, a bachelor of arts

degree is awarded by Bowdoin and a bachelor of science degree by the engineering school. The student should be aware that admission to these schools does not assure financial aid.

To fulfill the requirements of these programs, the student must start planning early. All students must take **Physics 17, 23, 27, 28, Chemistry 15-16, and Mathematics 11, 12, 13, and Computer Science 5**. In addition, a student taking the physical sequence is expected to complete **Physics 30** and an additional course in mathematics, physics, chemistry, or computer science. For the chemical sequence, **Chemistry 35-36** is expected. The student should also have at least ten semester courses outside of physics, mathematics, chemistry, and computer science. Economics is strongly suggested.

Students who wish to complete four years at Bowdoin may apply to Columbia for admission on a 4-2 program. Students who have honor grades in the sciences and are recommended by the coordinator are automatically admitted.

Students who wish to apply as regular transfer students into the junior year of any other engineering program must make the necessary arrangements themselves. Such students should apply to the Recording Committee for permission for study away. Upon the successful completion of the engineering program, a Bowdoin degree is awarded.

Because this program requires tight scheduling of courses, students should consult regularly with James H. Turner of the Department of Physics.

Teaching

Students interested in teaching in schools or graduate programs in education should discuss their plans with personnel in the Department of Education. The department maintains a register of those considering teaching careers. Since the normal advice will be that students include courses in psychology and education along with a major in a teaching field, they should make their interests known as early as possible.

Preparation for teaching is a continuous concern of an academic institution. The Committee on Teaching and Studies in Education expresses this concern. It coordinates the offerings of departments which are to be presented for public certification of teachers. It advises students and the faculty on needs in this field.

Twelve College Exchange

Bowdoin has joined with Amherst, Connecticut College, Dartmouth, Mount Holyoke, Smith, Trinity, Vassar, Wellesley, Wesleyan, Wheaton, and Williams to form the Twelve College Exchange program. Students from one college may apply to study for a year at one of the other colleges. About ten Bowdoin students will participate in the exchange during 1984-1985.

Bowdoin students wishing to participate in the exchange for the 1985-

1986 academic year should make application to the office of the Dean of the College by January 27, 1985. Detailed information on the course offerings of the participating colleges is available from the dean's office. Application is normally made for two semesters. It is hoped that the exchange will afford a student the opportunity to take courses which are not offered on his or her own campus or to study specialized aspects of his or her major field of concentration with faculty members who have achieved preeminence in that specialty. Course work satisfactorily completed at any of the participating colleges will receive credit toward a degree at the student's "home" college.

Women's Studies

Courses on the role of women and opportunities for related independent study projects are offered in the Afro-American Studies Program and the Departments of English, History, Romance Languages, Russian, and Sociology and Anthropology.

Courses listed for 1984-1985 and 1985-1986 include:

Afro-American Studies 2	History 54, 3
(Anthropology 14)	Sociology 19
English 87	Spanish 14
History 30	Russian 21

Additional information is available from the Dean of the College.

Courses of Instruction

Arrangement: The departments of instruction in the following descriptions of courses are listed in alphabetical order.

Time and Place of Classes: A schedule containing the time and place of meeting of all courses will be issued before each period of registration.

***Year Courses:** Courses marked with an asterisk are year courses and if elected must be continued for two consecutive semesters.

[Bracketed Courses]: All courses that cannot be scheduled for a definite semester are enclosed in brackets.

†Foreign Studies Requirement: Courses marked with a dagger will satisfy one semester of the foreign studies requirement.

Independent Study: See pages 79-80 for a description.

Prerequisites: Unless otherwise stated in the description, a course is open to all students.

Afro-American Studies

Administered by the Committee on Afro-American Studies

ASSISTANT PROFESSOR BOLLES, *Program Director*

Requirements for the Major in Afro-American Studies: The major in Afro-American studies consists of four required core courses, a concentration of four additional courses, and a one-semester independent study project. The core courses, **Afro-American Studies 1**, **Sociology 8**, and either **History 31** or **39** and **History 29** or **33**, have been chosen to give the student a thorough background for the study of the black experience and to provide an introduction to the varied disciplines of Afro-American studies.

The four-course concentration is intended to bring the methodologies and insights of several disciplines to a single problem or theme. Suggested concentrations are listed below; appropriate courses to be taken should be worked out by the student and the director of the Afro-American Studies Program. Alternatively, the student and the director may devise a concentration around another specific theme and submit a proposal to the Committee on Afro-American Studies for its approval. In addition, the independent study project, normally completed in the senior year, allows students to conduct research into a particular aspect of the black experience. Consult

with the director concerning courses offered in previous years which may satisfy the program requirements.

Race and Class in American Society

Four of the following: **Afro-American Studies 2** (Women in American Society: Implications of Race, Ethnicity and Class); **English 1, 1** (The Outsider in American Fiction); **History 3, 3** (The Poor in Society); **History 29** (The Civil Rights Movement); [**History 54, 4** (Poverty and Welfare in Industrial America)]; **Sociology 5** (Sociology of Health and Illness); **Sociology 6** (Urban Sociology); **Sociology 13** (Social Stratification); **Sociology 15** (Criminology and Criminal Justice); **Sociology 18** (Sociology of Law).

Cultures of the African Diaspora

Four of the following: **Afro-American Studies 5** (The Black Aesthetic); **Anthropology 6** (Cross-Cultural Perspective on Families); **French 22** (Racism and the African Reaction: A Dialectical Study of Modern French African Literature); [**History 33** (Afro-American Religion and Its Music: Redemption Songs)]; **History 41** (Islam in Africa); [**History 57** (Social Issues in African Literature)].

Political Economy of Blacks in the Third World

Four of the following: **Afro-American Studies 3** (The Anthropology of Development); **Economics 12** (Labor and Human Resources Economics); [**Economics 17** (The Economics of Population)]; **Economics 19** (Underdevelopment and Strategies for Development in Poor Countries); **Economics 20** (The Economics of Agricultural Development and the World Food Problem); **Government 23** (African Politics); **Government 25** (Political Analysis of the Forces of Change); **History 31** (History of West Africa); **History 32** (Colonial Latin America); **History 40** (Colonialism in Africa); **History 42** (History of East Africa: The Last Hundred Years); **History 43** (The Political Economy of South Africa); **History 44** (Transformations in Peasant Agriculture in Colonial Africa); **History 47** (Modern Latin America); **History 48** (Resistance and Protest in Black Africa); **Sociology 17** (World Population).

Coordinate Major in Afro-American Studies: The purpose of the coordinate major is to encourage specialization in Afro-American studies within the framework of a recognized academic discipline. This major is, by nature, interdisciplinary, and strongly encourages independent study. The coordinate major entails completion of an ordinary departmental major in sociology and anthropology, history, economics, or government. The student is expected to take those courses within the major department which are cross-

listed in the Afro-American Studies Program insofar as departmental major requirements permit. In addition, the student must take **Afro-American Studies 1** and four other courses outside the major department from a list approved annually by the Committee on Afro-American Studies. Students electing the coordinate major are required to carry out scholarly investigation of a topic relating to the Afro-American experience; not more than one of the elective courses may normally be an independent study course (**Afro-American Studies 200**).

1. African-American Cultures. Spring 1985. Ms. BOLLES.

An introduction to the study of African-American societies and peoples. Anthropological analysis of the different social formations of peoples of African descent in the New World. Selected case studies from the United States, Latin America, and the Caribbean. Examines such phenomena as New World slave systems, migration, the family, economics, and urbanization.

2. Women in American Society: Implications of Race, Ethnicity, and Class. Fall 1984. Ms. BOLLES.

Addresses the question of how women's lives are affected by their being born black, Hispanic, Chicano, Asian-American, native American, ethnic white, or white, in American society. Comparative approach outlines the variation of women's experiences on the basis of their cultural, racial, and ethnic realities. Discusses economic, political, and domestic roles; social status; socialization; education; the arts; and religion as they affect each group of women.

Prerequisite: **Afro-American Studies 1**, **Anthropology 1**, or **Soc. 1**.

†3. Anthropology of Development. Spring 1986. Ms. BOLLES.

See **Anthropology 12**, page 195.

†5. The Black Aesthetic. Spring 1985. Ms. BOLLES.

See **Anthropology 5**, page 194.

8. Race and Ethnicity. Fall 1984. MR. McEWEN.

See **Sociology 8**, page 190.

29. The Civil Rights Movement. Fall 1985. MR. LEVINE.

See **History 29**, pages 140-141.

[33. Afro-American Religion and Its Music: Redemption Songs.]

[39. An Introduction to Precolonial Africa.]

200. Independent Study.

Art

PROFESSOR OLDS, *Chairman*; PROFESSOR CORNELL; ASSOCIATE PROFESSOR LUTCHMANSINGH; ASSISTANT PROFESSORS HAGGERTY AND WEGNER; VISITING ASSISTANT PROFESSOR DONAHUE; LECTURER McKEE

The Department of Art comprises two programs: Art History and Criticism, and Visual Arts. Majors in the department are expected to elect one of these programs. The major in art history and criticism is devoted primarily to the historical and critical study of the visual arts as an embodiment of some of mankind's highest values and a record of the historical interplay of sensibility, thought, and society. The major in creative visual arts is intended to develop an understanding of visual thinking, sensitivity, and aesthetic discipline of emotion, and the technical skills associated with the media of visual expression and communication, among other things to prepare students for graduate study and careers in teaching, design, visual communication, or fine art.

Requirements for the Major in Art History and Criticism: Eight courses, excluding independent study, are required: **Art 1, Art 8 or 9, 12, 14, 21, 22, 48,** and one of **Art 40** through **47**. Among the remaining courses, the major is advised to include study in French and/or German, and courses in European social history, European intellectual history, philosophy of art, Western religious thought, and the other arts (literature, music, theater, cinema).

For the Joint Major Program: Six courses are required, as follows: **Art 1**; three courses from those numbered **Art 2** through **23**; one of **Art 42** through **46**; and **48**.

Interdisciplinary Majors: The department participates in interdisciplinary programs in art history and archaeology, and art history and religion. See pages 147-148.

Requirements for the Minor in Art History and Criticism: The minor consists of five courses: **Art 1, 12, 14, 21, and 22**.

The Major in Visual Arts is described on pages 95-97.

Courses in the History and Criticism of Art

1. Introduction to Art: Style, Society, and History. Fall 1984. MR. OLDS.

A study of the modes of expression and communication of the visual arts, principally painting, sculpture, and graphic design, as they have developed in the different cultures of mankind and through different periods of history; theories of art and the artist; style and the problem of stylistic tradition and innovation; thematic content and abstraction; and the dynamics of art, culture, and society. Required of majors in the art

history program, to be taken as early as possible and recommended as preparatory to upper-level courses in the history and criticism of art. Recommended as the beginning course for all students.

3. Freshman Seminar.

3, 1. Michelangelo and the Florentine Mannerists: Tradition and Innovation in Sixteenth-Century Italy. Fall 1984. Ms. WEGNER.

A comparison of the art of Michelangelo with that of four of his less well-known contemporaries: Pontormo, Rosso, Parmigiano, and Bronzino. In the sixteenth century Michelangelo's achievements and authority dominated the arts in Italy, yet these four artists challenged much of the tradition of classic Renaissance style and created radical new styles. Readings in art history on the definition of the term "mannerism"; translations of artists' letters, poems and diaries; contemporary criticism and biographies of painters; and descriptions of court life and manners. The investigation of several themes: a comparison of the crisis in sixteenth-century art with developments in the twentieth century; the connection between art and society; and the role of fantasy and imagination in art. Oral presentations, a series of short papers, a midterm, and a final examination required.

No previous knowledge of the subject is required.

3, 2. William Morris—Artist, Poet, Social Thinker. Spring 1985. Mr. LUTCHMANSINGH.

A study of William Morris, eminent nineteenth-century British personality, whose career touched upon the design of furniture, stained glass, tapestry, wallpaper, and books; the writing of poetry and prose romances; and artistic and social thought. In some of these, Morris was an important innovator. The seminar considers him in the light of late-Victorian artistic and intellectual history, including the impact of industrialization, the changing position of the artist and the craftsman, and the reform of industrial design. Oral presentations, short papers, and an examination required.

No previous knowledge of the topic is assumed.

9. Medieval Art. Spring 1985. Mr. OLDS.

Key monuments of medieval art and their respective cultures from the fall of Rome to the end of the Gothic period. The course begins with examples of early Christian art, continues with an examination of important works from the Byzantine, barbaric, and Carolingian periods, and ends with the periods of the Romanesque monasteries and Gothic cathedrals. Examples of the manuscript illuminations, ivory

carvings, metalwork, tapestries, and stained glass windows for which the Middle Ages are noted are also considered.

Prerequisite: **Art 1, 8**, or consent of the instructor.

12. Art of the Italian Renaissance. Spring 1985. **MR. OLDS.**

An approach to Renaissance Italian painting, sculpture, and architecture from the early fourteenth to the early sixteenth century, that is, from Giotto to Michelangelo, in their cultural contexts.

Prerequisite: **Art 1** or consent of the instructor.

[13. Northern European Art of the Fifteenth and Sixteenth Centuries.]

14. Baroque Art. Fall 1984. **MS. WEGNER.**

The art of seventeenth-century Europe. The naturalistic and classical revolution in painting carried out by Caravaggio, Annibale Carracci, and their followers in early seventeenth-century Rome and the development throughout Europe of these trends in the works of Rubens, Bernini, Georges de la Tour, Poussin, and others form one major theme of the course. The second is the rise of an independent school of painting in Holland. The development of Dutch landscape, still-life, genre, and portraiture is discussed in relation to artists such as Frans Hals, Jan van Goyen, Jacob van Ruysdael, and Jan Vermeer. The unique art of Rembrandt is studied in this context. Connections between art, religious ideas, and political conditions are stressed.

Prerequisite: **Art 1** or consent of the instructor.

17. American Architecture. Fall 1984. **THE DEPARTMENT.**

A study of architecture and the built environment of the United States from colonial times to the present. Among the main figures and topics examined are Jefferson and the civic architecture of the new nation; the Gothic Revival; the rise of the Chicago school; Sullivan, Wright, and the Prairie School; Olmsted and landscape design; the international style; and post-modern developments.

18. American Art from Colonial Times to the Civil War. Fall 1984. **THE DEPARTMENT.**

American architecture, sculpture, and painting are studied from their beginnings in colonial times to their development into a national art in the nineteenth century with the growth and expansion of the country. The major movements of neoclassicism, romanticism, and realism are examined in connection with their historical backgrounds. Special attention is devoted to such masters as Feke, Copley, Stuart, West, Peal, Audubon, Catlin, and Inness in painting, and Charles Bulfinch, Thomas Jefferson, and James Renwick in architecture.

19. **American Art from the Civil War to the Present Day.** Spring 1985. THE DEPARTMENT.

A continuation of Art 18. Stress placed on architecture through Richardson and the American tradition in painting and sculpture in the late nineteenth and twentieth centuries. Homer, Eakins, Ryder, Sargent, Whistler, Sloan, Wyeth, and other outstanding and representative artists of the period are included.

Prerequisite: Art 1 or consent of the instructor.

[20. **British Art.**]

21. **European Art of the Nineteenth Century.** Fall 1985. MR. LUTCHMAN-SINGH.

The development of European art in the nineteenth century, with emphasis on France, Germany, and Britain, studied primarily in terms of the artistic movements that dominated the century: neoclassicism, romanticism, realism, impressionism, post-impressionism, and symbolism; the art-criticism of Ruskin and Baudelaire; the changing relationship of art and artists to society; and the late nineteenth-century sources of modernism and the avant-garde.

Prerequisite: Art 1 or consent of the instructor.

22. **Twentieth-Century Art.** Spring 1986. MR. LUTCHMANSINGH.

A study of the major movements and masters of painting and sculpture in Europe of this century and of the rise of the New York school and its international repercussions since the 1940s; the definition of "modernism" in art; its invocation of archaic, primitive, and non-Western cultures; and the problems presented by the social situation of the modern movement, its relation to other elements of culture, and its place in the historical tradition of Western art.

Prerequisite: Art 1, 21, or consent of the instructor.

23. **Modern Architecture.** Spring 1986. THE DEPARTMENT.

The development of modern architecture from the mid-eighteenth to the mid-twentieth century. Begins with a study of the impact upon architectural thought and practice of the archaeological reconstruction of classical civilization, the Industrial Revolution, the rise of mass democracy, and urbanization; goes on to consider the major movements of the nineteenth century and the emergence of twentieth-century masters such as Wright, Gropius, Le Corbusier, Aalto, Fuller, Mies van der Rohe, and Louis Kahn; and concludes with a discussion of contemporary debates and polemics. An architectural tour of Boston and Cambridge will be scheduled as part of the course of study.

Prerequisite: Art 1 or consent of the instructor.

Seminars in Art History and Criticism

The seminars are intended to utilize the scholarly interests of members of the department and provide an opportunity for advanced work for selected students who have successfully completed enough of the regular courses to possess a background. Admittance to all seminars requires consent of the instructor. The department does not expect to give all, or in some cases any, seminars in each semester. As the seminars are varied, a given topic may be offered only once, or its form changed considerably from time to time.

[40. Museum Studies.]

42. **Studies in Northern Renaissance Art: Pieter Brueghel.** Fall 1984. MR. OLDS.

The art of Pieter Brueghel the Elder in the general context of sixteenth-century European painting, but focusing specifically on Brueghel's landscape paintings, his allegories and satires, and his position as a "social realist." Readings in sixteenth-century literature and modern scholarship provide a foundation for an understanding of Brueghel's achievements and his influence on European art. Among the works of art to be examined is an original Brueghel drawing in Bowdoin's collection.

Prerequisite: **Art 13** or consent of the instructor.

43. **Studies in Baroque Art: Caravaggio and His Contemporaries.** Spring 1986. MS. WEGNER.

The life and work of the painter, Michelangelo Merisi da Caravaggio (1571/72-1610), whose dynamic, naturalistic style astonished Rome and transformed the whole of European painting. A study of the artistic and social context in which Caravaggio formed his revolutionary style, a realistic, unidealized rendering of living models in powerful chiaroscuro. Readings drawn from contemporary biographies, police records, documents relating to works, and modern studies of the artist. Caravaggio is contrasted with his contemporaries: Filippo Neri, founder of the New Church and a cult of popular piety in Rome; Il Cavalier d'Arpino and Federico Zuccaro, two founders of the Roman painters' academy; the painter Giovanni Baglione, a bitter enemy; and fellow innovators, Annibale Carracci and Peter Paul Rubens.

Prerequisite: **Art 14**, or consent of the instructor.

46. **Studies in Modern Art: Late Victorian Art, Architecture, and Design.** Fall 1984. MR. LUTCHMANSINGH.

A study of British art, architecture, and design in the aftermath of the Gothic Revival and the Pre-Raphaelite movement. Examines the following in some depth: the later work of the Pre-Raphaelites, the arts

and crafts movement, art nouveau, and impressionism; Watts, Alma-Tadema, Whistler, and Sargent; the architecture of Butterfield, Norman Shaw, and Voysey; and the dominating presence of Ruskin and Morris.

Prerequisite: **Art 20** or **21** or consent of the instructor.

[48. **Studies in Art Historiography and Criticism.**]

200. Independent Study. THE DEPARTMENT.

Visual Arts

Requirements for the Major in Visual Arts: Eleven courses are required in the department, to include **Art 51, 52, 61, and 62**; plus four other courses in the division, at least one of which must be numbered 70 or higher; and **Art 1, 21, and 22**. Independent studies undertaken as honors projects will not count toward the major. Majors also are strongly advised to include study of European and American history, philosophy of art, religion, poetry, and other arts among their remaining courses.

Requirements for the Minor in Visual Arts: **Art 51, 52**, either **61** or **62**, plus two additional studio courses, at least one of which will be of the 70 series or higher.

An extensive and coherent portfolio is expected of all majors contemplating professional work in the visual arts. Recommended for majors anticipating careers or graduate education in architecture: **Physics 17, Chemistry 15, 16, Geology 11**, and mathematics courses; in education: **Psychology 11 and 13, and Education 1-3**; in film and visual communication: **English 10, 11, and 13**; in graphic design and computer graphics: **Computer Science 5**.

Students wishing to pursue a joint major in visual arts and some other subject are required to take at least six courses in the division.

[50. **Visual Thinking.**]

51. Introduction to Drawing. Fall 1984 and Spring 1985. MR. DONAHUE.

Introduction to conventions of pictorial organization to engender clear visual thinking, including abstract formal organization of the plane, as well as conventions of representational art. Introduction to concepts of proportion and perspective. Media include pencil, charcoal, and ink.

Enrollment limited by studio facilities.

52. Introduction to Painting. Fall 1984 and Spring 1985. MR. DONAHUE.

Introduction to pictorial organization and color theories. Working from landscape and still life, the class stresses sensitivity to painting materials and the thoughtful organizing of perceptual experience.

Enrollment limited by studio facilities.

- 61. Drawing I.** Fall 1984. MR. HAGGERTY. Spring 1985. MR. CORNELL.

A continuation of the principles explored in **Art 51**, with special emphasis on figurative drawing.

Prerequisite: **Art 51**.

- 62. Painting I.** Spring 1985. MR. CORNELL.

Continued study of the techniques of painting and the principles of composition. Problems based on direct experience.

Prerequisite: **Art 52**.

- 63. Photography I.** Spring 1985. MR. McKEE.

Photographic visualization and composition as consequences of fundamental techniques of black-and-white still photography. Class discussions and demonstrations, examination of master works, field and laboratory work in 35 mm. format. Students must have the use of suitable, nonautomatic camera. Enrollment limited by darkroom facilities.

[64. Principles of Three-Dimensional Composition.]

- 65. Introduction to Printmaking.** Fall 1984. MR. HAGGERTY.

An introduction to intaglio printmaking and monotype.

Prerequisite: **Art 50, 51**, or consent of instructor.

[66. Architecture I.]

- 71. Drawing II.** Spring 1985. MR. HAGGERTY.

A continuation of the principles studied in **Art 61**. Working with colored media on paper, this class stresses compositional problems involved in representational drawing. Particular emphasis on protracted drawings and the relationship between drawing and painting. Lectures, group critiques, and written assignments augment the studio portion of the class.

Prerequisite: **Art 61** or consent of the instructor.

[72. Painting II.]

- 73. Photography II.** Fall 1984. MR. McKEE.

Review of conceptual and technical fundamentals of black-and-white photography and exploration of the different image-making possibilities inherent in selected related photographic media. Seminar discussions and field and laboratory work. Students should provide their own small-format camera.

Prerequisite: **Art 63** or consent of the instructor.

[74. Sculpture I.]

- 75. Advanced Printmaking.** Spring 1985. MR. HAGGERTY.

Exploration of intaglio printmaking and monotype.

Prerequisite: **Art 51** or consent of the instructor.

[76. Architecture II.]

[80. Creativity.]

81. Drawing III. Spring 1985. MR. HAGGERTY.

Advanced projects in drawing.

Prerequisite: Art 71.

[82. Painting III.]

[85. Printmaking III.]

90. Independent Study for Honors. Fall 1984. THE DEPARTMENT.

Open to all senior majors and required of honors candidates. The study of the creative process in relation to individual student achievement and to the theories of modern art. Lectures, critiques, discussions. Paper and exhibition required.

Prerequisite: Senior status or consent of the department.

200. Independent Study. THE DEPARTMENT.

Biochemistry

Administered by the Committee on Biochemistry

PROFESSOR HOWLAND, *Chairman*

Requirements for the Major in Biochemistry: All majors must offer the following courses: Biology 11, Biology (Chemistry) 44, 45; Chemistry 15, 16, 25, 26, 35; Mathematics 11, 12; and Physics 17. In addition, majors must offer four courses from the following: Biology 34, 41, 43, 46, 47, 49, 50, 200; Chemistry 22, 36, 38, 46, 200; Physics 23, 26, 27, 28, 200. Students may include as electives up to two 200 courses. They may petition the Committee on Biochemistry to be allowed to substitute other science courses as electives. Finally, a student intending to carry out a laboratory Independent Study course in Biochemistry should first take Chemistry 22, Biology 49, or Biology 50. Students offering Independent Study courses for the Biochemistry major should register for Biochemistry 201, 202, etc.

Biology

ASSOCIATE PROFESSOR STEINHART, *Chairman*; PROFESSORS HOWLAND AND HUNTINGTON; ASSOCIATE PROFESSOR SETTLEMIRE; ASSISTANT PROFESSOR

DICKINSON; INSTRUCTOR ZAMER; TEACHING FELLOWS BRYER,

GARFIELD, AND WINE

Requirements for the Major in Biology: The major consists of seven semester courses in the department exclusive of courses in the 200 series.

Major students are required to complete five core courses including **Biology 11** and **12** and three of the following: **Biology 13, 14, 17, and 18**. Majors are also required to complete two other courses within the department as well as **Mathematics 11, Physics 17, and Chemistry 25** and are advised to complete **Biology 11 and 12** and the mathematics, physics, and chemistry courses by the end of the sophomore year. Students planning postgraduate education in science or in the health professions should note that graduate and professional schools are likely to have additional admissions requirements in mathematics, physics, and chemistry.

Interdisciplinary Major: The department participates in interdisciplinary programs in biochemistry and psychobiology. See pages 97 and 148.

Requirements for the Minor in Biology: The minor consists of **Biology 11 and 12**, plus two other courses appropriate to the major.

3. The History of Biology and Medicine. Fall 1985. MR. HOWLAND.

A study of the biological and medical sciences with emphasis upon the Western and Chinese classical period, the Islamic and European Middle Ages, the Renaissance, and the nineteenth century. The course considers scientists' views of their own activities and the manner in which they are viewed by their contemporary society. This course may not be counted toward the major in biology or biochemistry.

11. Introductory Cell Biology. Every fall. THE DEPARTMENT.

Examination of fundamental biological phenomena with special reference to cells. Topics include ultrastructure, cell growth, membrane transport, and the interaction between viruses and host cells. Lectures and three hours of laboratory work each week. Understanding of high school chemistry is assumed.

12. Biology of Organisms and Populations. Every spring. THE DEPARTMENT.

A study of the properties of organisms and populations with evolution as a central, unifying theme. Topics include the origin of life; the mechanisms of evolution; a survey of the kingdoms of living organisms; the physiology, morphology, and development of animals and plants; and the effects of the environment on populations. Lectures and three hours of laboratory work each week.

Prerequisite: **Biology 11**.

13. Genetics. Every fall. MR. STEINHART.

Integrated coverage of organismic and molecular levels of the genetics of eucaryotes and procaryotes. Topics include the structure and function of chromosomes, the mechanisms and control of gene expression, recombination, mutagenesis, and the determination of gene order and sequence. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 61**.

Prerequisite: **Biology 12**.

14. **Comparative Physiology.** Every fall. Ms. DICKINSON.

The relationship between structure and function in organ systems and in invertebrates and vertebrates as a whole. The interdependency of organ systems. Lectures and three hours of laboratory work or conferences each week.

Prerequisite: **Biology 12** and **Chemistry 25**.

17. **Ecology.** Fall 1984. MR. GILFILLAN.

The relationships between organisms and their environment. Topics include the flow of matter and energy through ecosystems, population dynamics, interactions between and within species, the effect of the environment on evolution, and man's role in the biosphere. Individual projects emphasize independence of the student and diversity of the subject. Lectures, conferences, and three hours of laboratory or field work each week.

Prerequisite: A previous college-level science course or consent of the instructor.

[18. **Developmental Biology.**]

24. **Biology of Plants.** Every spring. MR. STEINHART.

Emphasis on the physiology of plants. Topics include the nature and control of growth and differentiation, water and nutrient translocation, metabolism, hormone physiology, and ecology of plants. Laboratory work stresses association of structure and function in tissues and organs of higher plants and includes an introduction to field botany. Lectures and three hours of laboratory work each week.

Prerequisite: **Biology 12**.

25. **Invertebrate Zoology.** Fall 1984. MR. ZAMER.

Emphasis on the study of marine invertebrate structure, ecology, and physiology. The interrelationships within particular marine ecosystems such as coral reefs and estuaries are considered, and evolutionary schemes among the major invertebrate phyla are presented. Particular emphasis on larval ecological strategies among marine invertebrates. Laboratory work includes examination of and experimentation with living animals. Several field trips to local marine habitats are planned. Four hours of laboratory each week.

Prerequisite: **Biology 12**.

26. **Ornithology.** Every spring. MR. HUNTINGTON.

A study of the biology of birds, especially their behavior and ecology. Facilities used in the course include the Alfred O. Gross Library of Ornithology and the College's collection of North American birds. Field

trips, including a visit to the Bowdoin Scientific Station (see pages 277-278), are an important feature of the course.

Prerequisite: A previous college-level science course or consent of the instructor.

41. Microbiology. Every fall. MR. SETTLEMIRE.

An examination of the structure and function of microorganisms, primarily bacteria, with a major emphasis on molecular descriptions. Subjects covered include structure, metabolism, mechanism of action of antibiotics, basic virology. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 49**.

Prerequisite: **Biology 12** and **Chemistry 25**.

42. Physiological Ecology. Spring 1985. MR. ZAMER.

A broad approach to examine the mechanisms by which animals adjust to changes in environmental conditions. Adaptations in marine invertebrates are emphasized, but other organisms are included. Examples of morphological, behavioral, and population-level adaptations to different environmental conditions are discussed in relation to the physiology of these organisms. Short-term, individual student projects are planned for the laboratories.

Prerequisite: **Biology 14**.

43. Comparative Neurobiology and Behavior. Spring 1985. MS. DICKINSON.

A comparative study of the function of the nervous system in invertebrate and vertebrate animals. Topics include the physiology of individual nerve cells and their organization into larger functional units, the behavioral responses of animals to cues from the environment, and the neural mechanisms underlying such behaviors.

Prerequisite: **Biology 14** and **Chemistry 25**. **Physics 17** is recommended.

44. Biochemistry I. Every spring. MR. HOWLAND.

Proteins and enzymes. An introduction to the chemistry and biology of small biological molecules, macromolecules, and membranes. Emphasis will be placed upon kinetics and mechanisms of enzymic reactions and upon equilibrium and non-equilibrium thermodynamics underlying biological processes.

Prerequisite: **Chemistry 26**.

45. Biochemistry II. Every fall. MR. PAGE.

See **Chemistry 45**, page 104.

46. Immunology. Spring 1985. MR. SETTLEMIRE.

48. Biochemical Endocrinology. Spring 1986. MR. SETTLEMIRE.

61. Laboratory in Microbiology and Genetics. Every fall. MESSRS. STEINHART AND SETTLEMIRE.

Lectures and laboratories to include experimental design, identification and culturing of eucaryotic and procaryotic cells, the principles of light and electron microscopy, radioisotopes in biological experimentation, immunochemistry, and cytogenetics. One to two hours of lecture and three to six hours of laboratory each week. Microbiology and genetics students contemplating postgraduate studies in biological science are strongly encouraged to enroll in the laboratory course.

Prerequisite: Concurrent enrollment in either **Biology 13** or **41**.

62. Advanced Laboratory in Molecular Biology and Biochemistry. Every spring. MESSRS. HOWLAND, SETTLEMIRE, AND STEINHART.

Experiments employing contemporary techniques in molecular biology and biochemistry. Emphasis placed on isolation and physical properties of nucleic acids, isolation and kinetics of enzymes, and composition and activities of biological membranes. Techniques studied and used include radioisotopes, spectrophotometry, electrophoresis, thin-layer and gas chromatography, and scanning electron microscopy. This course is a logical precursor to independent study in the areas of molecular biology and biochemistry.

Prerequisite: Two from **Biology 13, 41, 44, 45**.

91. Advanced Biochemistry. Fall 1984. MR. HOWLAND.

A seminar dealing with biological energy transfer and the biochemistry of membranes. Based on readings from the current literature.

Prerequisite: **Biology 44** or consent of the instructor.

92. Virology. Spring 1986. MR. STEINHART.

200. Independent Study. THE DEPARTMENT.

Chemistry

PROFESSOR PAGE, *Chairman*; PROFESSORS SAMUEL BUTCHER, HOWLAND, AND MAYO; ASSOCIATE PROFESSORS CHRISTENSEN AND SETTLEMIRE; ASSISTANT PROFESSORS BENNETT AND NAGLE; DIRECTOR OF LABORATORIES FOSTER; TEACHING FELLOWS KAREN BUTCHER, FICKETT, AND HOTHAM; RESEARCH FELLOW DAVID BUTCHER

Courses are numbered to follow a general format. Courses 1 through 9 are at the introductory level. They do not have prerequisites and are appropriate for nonmajors. Courses 10 through 19 are introductory without a formal prerequisite and leading to advanced-level work in the department. Courses 20

through 29 are at the second level of work and generally require only the introductory course as a prerequisite. Courses 30 through 39 are normally taken in the junior year and have two or more courses as prerequisites. Courses 40 through 49 normally are taken in the junior or senior year and have two or more courses as prerequisites.

Requirements for the Major in Chemistry: The required courses are **Chemistry 15, 16, 22, 25, 26, 35, 36**, three advanced courses approved by the department, and **Physics 17**. Because the department offers programs based on the interest of the student, a prospective major is encouraged to discuss his or her plans with the department as early as possible. Students, faculty members, and outside speakers lead seminars sponsored by the department and the student affiliate chapter of the American Chemical Society.

Independent Study: A student wishing to conduct a laboratory independent study project (**Chemistry 200**) must have taken at least one of the following courses: **Chemistry 22, Biology 61, or Biology 62**.

Interdisciplinary Major: The department participates in an interdisciplinary program in biochemistry. See page 97.

Requirements for the Minor in Chemistry: The minor consists of **Chemistry 15 and 16**, plus three other chemistry courses appropriate to the major.

5. Topics in Chemistry.

5, 1. Environmental Chemistry. Spring 1985. MR. PAGE.

The goal of the course is to provide the student majoring outside the sciences with an introduction to the central concepts of chemistry within the context of man and the environment. Emphasis will be on the applications of chemistry to various familiar things associated with our technological way of life and the environment. Discussion of air pollution, water pollution, and energy.

15. Introductory Chemistry I. Every fall. MR. BENNETT AND THE DEPARTMENT.

An introduction to chemistry, including chemical stoichiometry; the properties of gases, solids, and liquids; acids and bases; ionic and non-ionic equilibrium; and oxidation-reduction. Lectures, conferences, and three hours of laboratory a week.

16. Introductory Chemistry II. Every spring. MR. NAGLE AND THE DEPARTMENT.

Fundamental topics in inorganic and physical chemistry. Elementary thermodynamics, chemical kinetics, and several approaches to chemical bonding are discussed, as are the periodic properties of the elements and topics in descriptive inorganic chemistry. Lectures, conferences, and three hours of laboratory a week.

Prerequisite: **Chemistry 15** or consent of the instructor.

22. **Fundamentals of Inorganic and Analytical Chemistry.** Fall 1984. MR. NAGLE.

Quantitative chemical analysis of inorganic substances. The laboratory includes several instrumental analysis experiments in addition to more traditional ones. Lectures, conference, and four hours of laboratory work a week. The department recommends that **Chemistry 22** be taken concurrently with **Chemistry 25** by all students planning to major in chemistry.

Prerequisite: **Chemistry 16**.

25. **Elementary Organic Chemistry.** Every fall. MR. MAYO.

An introduction to the chemistry of the compounds of carbon. The foundation for further work in organic chemistry and biochemistry. Lectures, conference, and four hours of laboratory work a week.

Prerequisite: **Chemistry 16**.

26. **Organic Chemistry.** Every spring. MR. PAGE.

A continuation of the study of the compounds of carbon. **Chemistry 25** and **26** cover the material of the usual course in organic chemistry and form a foundation for further work in organic chemistry and biochemistry. Lectures, conference, and four hours of laboratory work a week.

Prerequisite: **Chemistry 25**.

35. **Physical Chemistry I.** Every fall. MR. CHRISTENSEN.

Thermodynamics and its application to chemical changes and equilibria that occur in the gaseous, solid, and liquid states. Macroscopic behavior of chemical systems is related to molecular properties by means of the kinetic theory of gases and statistical mechanics. Also included is the study of chemical kinetics. Lectures and three hours of laboratory work a week.

Prerequisite: **Chemistry 16**, **Physics 17**, **Mathematics 12**, or consent of the instructor. **Mathematics 13** recommended.

36. **Physical Chemistry II.** Every spring. MR. CHRISTENSEN.

Development and principles of quantum mechanics with applications to atomic structure, chemical bonding, chemical reactivity, and molecular spectroscopy. Lectures and three hours of laboratory work a week.

Prerequisite: **Chemistry 35** or consent of the instructor.

38. **Molecular Structure Determination in Organic Chemistry.** Fall 1984. MR. MAYO.

Application of infrared, Raman, ultraviolet, nuclear magnetic resonance, and mass spectrometry to the structural elucidation of complex organic systems. Lectures and three hours of laboratory work a week.

Prerequisite: **Chemistry 26** or consent of the instructor.

[41. Advanced Analytical Chemistry: Computer Interfacing.]**42. Inorganic Chemistry.** Fall 1984. MR. NAGLE.

The structures, properties, reaction mechanisms, and syntheses of inorganic compounds. Lectures and three hours of laboratory work a week.

Prerequisite: **Chemistry 35** and **36**, or consent of the instructor.

44. Biochemistry I. Every spring. MR. HOWLAND.

See **Biology 44**, page 100.

45. Biochemistry II. Every fall. MR. PAGE.

An introduction to metabolism. Topics will include pathways in living cells by which energy is trapped, pathways by which important biological molecules are synthesized, and the bioorganic chemistry of nucleic acid and protein synthesis.

Prerequisite: **Chemistry 44**.

46. Advanced Topics in Chemistry.**46, 1. Marine Geochemistry.** Fall 1984. MR. BENNETT.

An introduction to the chemical composition and physical properties of marine rocks and sediments. Lecture topics will include clay minerals, volcanic rocks, biogenic sediments, organic matter, zeolites, hydrothermal activity, geochronology, and geochemical cycles in the oceans. Lectures will also examine the biological and chemical processes that form and alter marine rocks and sediments and how those processes affect the composition of seawater. Three hours of laboratory a week devoted to analytical techniques in geochemistry.

Prerequisite: **Chemistry 16** and a semester of geology, or consent of the instructor.

46, 2. Photochemistry: Light, Chemical Change, and Life. Spring 1985. MR. CHRISTENSEN.

Considers descriptions of light and energy levels in molecules and how light and molecules interact. Looks at several examples of photochemistry, e.g., Woodward-Hoffmann and Fukui models for reactivity in pericyclic reactions, atmospheric photochemistry, photochemical isotope enrichment, applications of energy transfer, etc. Topics in photobiology, namely photosynthesis, artificial photosynthesis, vision, and the biological effects of ultraviolet radiation discussed.

Prerequisites: **Chemistry 36** or consent of instructor.

[47. Advanced Physical Chemistry.]

48. Advanced Organic Chemistry. Spring 1985. MR. MAYO.

Topics in natural products chemistry discussed in the context of chemical interactions between plants and insects, chemical communication within animal species, chemical defense against predation in arthropods, chemical ecology of fish and other marine systems, and if time permits nonhormonal interaction of terpenoid compounds in ecology.

Prerequisite: **Chemistry 26**.

200. Independent Study. THE DEPARTMENT.

For students intending to conduct a laboratory research project, either **Chemistry 22**, **Biology 61**, or **Biology 62** is required.

Classics

PROFESSOR AMBROSE, *Chairman*; ASSOCIATE PROFESSOR NIELSEN;
ASSISTANT PROFESSOR BOYD

Requirements for the Major in Classics: The major in classics consists of eight courses chosen from the departmental offerings. Majors must take at least two courses at the advanced level of either the Greek or Latin languages (**Greek 5, 6** or **Latin 7, 8**). Two of the eight courses for the major requirement may be selected from the departmental offerings in archaeology. **Classics 9** or **10** may be included only with consent of the department.

Requirements for the Major in Archaeology-Classics: The major consists of eight courses in the department—a minimum of four in archaeology, including **Archaeology 1** and **2**, and a minimum of four in either ancient language, Greek or Latin. It is recommended that one of these language courses be at the advanced level, i.e., **Greek 5** or **6**, **Latin 7** or **8**.

Interdisciplinary Major: The department participates in an interdisciplinary program in archaeology and art history. See page 148.

Requirements for the Minor in Archaeology-Classics: Students may choose a minor in one of four areas—archaeology, Greek, Latin, or classics. The minor in archaeology consists of four archaeology courses, including **Archaeology 2**. The minor in Greek consists of four courses in the Greek language. The minor in Latin consists of four courses in the Latin language. The minor in classics consists of four courses in Greek and Latin, two of which must be at the intermediate level, i.e., **Greek 3, 4**; **Latin 4, 5**.

Archaeology

†1. **Greek Archaeology: The Minoan-Mycenaean Civilization.** Fall 1984.
MR. NIELSEN.

ments. Traces the development of civilization and interaction of culture
An introduction to Aegean civilization through a study of the monu-

between mainland Greece and Crete from the Neolithic period to the end of the Mycenaean era. Particular emphasis on architecture, pottery, and sculpture.

†2. **Greek Archaeology: Preclassical to Hellenistic.** Spring 1985. MR. NIELSEN.

An introduction to Greek civilization through a study of monuments. Traces the development of civilization on mainland Greece from the end of the Mycenaean era through the Hellenistic period. Attention also given to Greek sites in Ionia and Italy. Particular emphasis on architecture, pottery, and sculpture.

†3. **Greek Painted Pottery.** Fall 1984. MR. NIELSEN.

Traces the development of the shape and decoration of Greek pottery from the Geometric period through the end of the Classical era. The characteristics of individual artists and the treatment of various Greek myths in different periods are studied.

Prerequisite: **Archaeology 2** or consent of the instructor.

4. **Greek Architecture.** Spring 1985. MR. NIELSEN.

Traces the development of Greek architecture from the Geometric period through the Hellenistic period. The course is not limited to the development of the temple, but also considers private and public buildings. Among the aspects considered are city planning, religious sanctuaries, and temples.

Prerequisite: **Archaeology 2** or consent of the instructor.

5. **Greek Sculpture.** Fall 1985. MR. NIELSEN.

Traces the development of monumental stone sculpture from the late seventh century B.C. to the Hellenistic period. Focuses on freestanding sculpture and relief work as well as the development of architectural sculpture, in particular, pedimental decoration in Greek temples. In addition, consideration is given to the problems of dating by stylistic analysis (with reference to specific pieces), reconstructing missing Greek originals from Roman copies, the relationship between sculptor and vase painter in contemporary periods, and relationships between Greek bronzes and stone sculpture.

Prerequisite: **Archaeology 2**.

6. **The Etruscans.** Spring 1986. MR. NIELSEN.

A study of the origins of this people which made its appearance in central Italy in the seventh century B.C.; the source of their wealth; their impact on the other cultures of the Mediterranean. An attempt to reconstruct their culture as it can be understood from the architecture and artifacts preserved today.

Prerequisite: **Archaeology 2** or consent of the instructor.

Classics

†9. **Classical Mythology.** Spring 1985. Ms. BOYD.

Focuses on the mythology of the Greeks and includes an intensive study of the myths themselves. Other subjects considered are recurrent patterns in Greek myths, the application of modern sociological and psychological theories to the study of myth, ancient creation myths, and the relation of mythology to religion. Concludes with an examination of the use of myths in ancient literature. Course limited to seventy-five students.

†10. **Greek Literature in Translation.** Spring 1986. MR. AMBROSE.

An introduction to the important works of Greek literature in English translation. The objective of the course is not only to provide an understanding and appreciation of the literary achievements of the Greeks, but also to convey a sense of the meaning and spirit of Greek literature in the context of Greek history and culture.

Greek

†1. **Elementary Greek.** Every fall. MR. AMBROSE.

A thorough presentation of the elements of accidence and syntax based, insofar as possible, on unaltered passages of classical Greek.

†2. **Continuation of Course 1.** Every spring. MR. AMBROSE.

In the latter half of the term a work of historical or philosophical prose is read.

†3. **Plato.** Every fall. Ms. BOYD.†4. **Homer.** Every spring. MR. AMBROSE.†5. **Selected Greek Authors.** Every fall. MR. AMBROSE.

Designed to meet the needs of advanced students in Greek literature, with extensive readings from representative authors in such fields as drama; history; philosophy; lyric, elegiac, and epic poetry; and oratory. *The course may be repeated for credit with the contents changed.*

†6. **Continuation of Course 5.** Every spring. MR. AMBROSE.

Latin

†1. **Elementary Latin.** Every spring. Ms. BOYD.

A concentrated presentation of the elements of Latin grammar. Designed for students without previous instruction in Latin but also open to students with less than three years of Latin in secondary school.

†3. **Cicero.** Every fall. Ms. BOYD.

A rapid review of grammar followed by readings from Cicero and a brief introduction to Latin poetry.

Prerequisite: Latin 1 or two years of secondary school Latin.

†4. **Vergil. The Aeneid.** Every spring. MR. NIELSEN.

Prerequisite: Latin 3 or equivalent.

†5. **Horace and Catullus.** Every fall. MR. AMBROSE.

Prerequisite: Latin 4 or equivalent.

†7. **Selected Latin Authors.** Every fall. Ms. BOYD.

Designed to meet the needs of advanced students in Latin literature with extensive readings from representative authors in such fields as satire, drama, philosophy, history, and elegy. *The course may be repeated for credit with the contents changed.*

†8. **Continuation of Course 7.** Every spring. Ms. BOYD.

200. **Independent Study.** THE DEPARTMENT.

Computer Science and Information Studies

PROFESSOR GIBBS, *Chairman*

Computer science studies computers and the principles of representation, processing, and presentation of information. It is also concerned with the organization, application, and theoretical characterization of the properties and limitations of computers. Computer science and information studies courses are not designed to train students for careers as programmers but to develop in students an appreciation for the achievements made possible by computers in a technologically based society and for the problems and limitations of computers.

To enter graduate school in computer science, students should become proficient in programming in a general-purpose language such as Pascal, an applicative language such as LISP, and an assembler language. Further, it is necessary to develop an appreciation for the scientific approach to problem solving and to become familiar with traditional areas of research in computer science. As in other problem-oriented disciplines, students should master mathematics and develop problem-solving skills. Students who intend to pursue advanced study should major in mathematics or physics and elect as many computer science and information studies courses as feasible.

5. **Introduction to Computing.** Every semester. MR. GIBBS.

Fundamental concepts of computer science, including programming, problem solving, algorithms, programming in a higher-level language,

debugging, characteristics and organization of computers, data structures, and fundamentals of programming style. Open to all students.

11. Data Structures. Every fall. Fall 1984. MR. GIBBS.

Representation of data and algorithms associated with data structures. Topics include representation of lists, trees, graphs, and strings; algorithms for searching and sorting.

Prerequisite: Computer Science 5.

20. Computer Organization. Every spring. Spring 1985. MR. GIBBS.

Organization of computer hardware and software; machine language, assembler language, microprogramming, assemblers, loaders, instruction sets, addressing techniques, fundamentals of computer architecture.

Prerequisite: Computer Science 5.

200. Independent Study. THE DEPARTMENT.

Economics

PROFESSOR SHIPMAN, *Chairman*; PROFESSORS FREEMAN AND VAIL;
ASSOCIATE PROFESSOR GOTTSCHALK; ASSISTANT PROFESSORS FITZGERALD,
GOLDSTEIN, AND KHAN; INSTRUCTORS DEAN AND WOLFE

The Major in Economics is designed for students who wish to obtain a systematic introduction to the basic theoretical and empirical techniques of economics. It provides an opportunity to study economics as a social science with a core of theory, to study the process of drawing inferences from bodies of data and testing hypotheses against observation, and to study the application of economic theory to particular social problems. Such problems include economic development, the functioning of economic institutions (e.g., corporations, government agencies, labor unions), and current policy issues (e.g., poverty, pollution, energy, and monopoly). The major is a useful preparation for graduate study in economics, law, business, or public administration.

The major consists of Economics 1 and 2, three "core" courses (Economics 3, 5, and 6), one advanced topic course (Economics 16 or any 40-level course), and two additional courses in economics. Economics 1 is a prerequisite for Economics 2, and both 1 and 2 are prerequisites for most other economics courses. Prospective majors are encouraged to take at least one core course by the end of the sophomore year and all three core courses should normally be completed by the end of the junior year. Advanced topics courses normally have some combination of Economics 3, 5, and 6 as prerequisites. Economics 4, Accounting, does not count toward the economics major.

Qualified students may undertake self-designed, interdisciplinary major

programs or joint majors between economics and related fields of social analysis.

Interdisciplinary Major: The department participates in an interdisciplinary major in mathematics and economics. See page 148.

Requirements for the Minor in Economics: The minor consists of **Economics 1** and **2**; **5** or **6**; and two electives numbered **7** or above.

1. Principles of Microeconomics. Every semester. THE DEPARTMENT.

Economic analysis and institutions with special emphasis on the allocation of resources through markets. The theory of demand, supply, cost, and market structure is developed. It is applied to problems in anti-trust policy, environmental quality, energy, education, health, the role of the corporation in society, income distribution, and poverty. Students desiring a comprehensive introduction to economic reasoning should take both **Economics 1** and **2**.

2. Principles of Macroeconomics. Every semester. THE DEPARTMENT.

An introduction to economic analysis and institutions with special emphasis on determinants of the level of national income, prices, and employment. Current problems of inflation and unemployment are explored with the aid of such analysis, and attention is given to the sources and consequences of economic growth. Alternative views of the effectiveness of fiscal, monetary, and other governmental policies are analyzed.

Prerequisite: **Economics 1**.

3. Economic Statistics. Fall 1984. MR. WOLFE.

An introduction to the data and statistical methods used in economics. A review of the systems that generate economic data and the accuracy of such data is followed by an examination of the statistical methods used in testing the hypotheses of economic theory, both micro- and macro-. Probability, random variables and their distributions, methods of estimating parameters, hypothesis testing, regression, and correlation are covered. The application of multiple regression to economic problems is stressed.

Prerequisite: **Economics 1** and **2**.

[4. Accounting and the Analysis of Financial Statements.]

5. Microeconomics. Fall 1984. MR. FREEMAN. Spring 1985. MR. FITZGERALD.

An advanced study of contemporary microeconomic theory. Analysis of the theory of resource allocation and distribution with major emphasis on systems of markets and prices as a social mechanism for making resource allocation decisions. Topics include the theory of individual choice

and demand, theory of the firm, market equilibrium under competition and monopoly, general equilibrium theory, and welfare economics.

Prerequisite: **Economics 1 and 2.**

6. Macroeconomics. Every spring. MR. GOLDSTEIN.

An advanced study of contemporary national income, employment, and inflation theory. Consumption, investment, government receipts, government expenditures, money, and interest rates are examined for their determinants, interrelationships, and role in determining the level of aggregate economic activity. Policy implications are drawn from the analysis.

Prerequisite: **Economics 1 and 2.**

7. The International Economy. Fall 1984. MS. DEAN.

An analysis of the factors influencing the direction and composition of trade flows among nations, balance of payments equilibrium and adjustment mechanisms, and the international monetary system. Basic elements of international economic theory are applied to current issues such as tariff policy, capital flows and international investment, reform of the international monetary system, and the international competitiveness of the American economy.

Prerequisite: **Economics 1 and 2.**

8. American Economic History and Development. Fall 1984. MR. SHIPMAN.

A study of economic growth and industrialization in the United States and Canada, combining elements of development theory, economic geography, and institutional history. A general knowledge of American history is assumed.

Prerequisite: **Economics 1 and 2.**

9. Economics of Money, Banking, and Finance. Fall 1985.

The general principles and institutions of money, banking, and financial markets as they relate to the performance of the economic system. Current problems concerning financial institutions, the flow of funds into investment, the Federal Reserve System, inflation, and the use of monetary and financial controls are considered.

Prerequisite: **Economics 1 and 2.**

10. Economics of the Public Sector. Fall 1985. MR. FITZGERALD.

The economic role of government. Deals with theoretical and policy issues of government expenditures and revenues in meeting such social goals as allocative efficiency and income redistribution. Issues on the current political agenda are given special attention.

Prerequisite: **Economics 1 and 2.**

[11. Regional and Urban Economics.]

12. **Labor and Human Resource Economics.** Spring 1986. MR. GOTTSCHALK.
Theories of labor market structure and performance. Manpower and human resources policies. Topics are covered from an institutional as well as an analytical point of view.

Prerequisite: Economics 1 and 2.

13. **History of Economic Thought.** Spring 1985. MR. SHIPMAN.
A comparative study of the "worldly philosophers" from the seventeenth century onward. Special attention is given to the historical development of those ideas and concepts now constituting the core of economic analysis, and to the relation such ideas bear to the mainstream of intellectual history.

Prerequisite: Economics 1 and 2.

- †14. **Comparative Political Economy.** Fall 1984. MR. VAIL.

The course begins with an investigation of criteria for defining and evaluating the performance of different modes of production. A historical, class analytic framework for comparative study is set out. The core of the course consists of studies of several paths to socialism including the Soviet Union, China, Hungary, and Yugoslavia. Concludes with a study of Sweden's "middle way" and its implications for late capitalism.

Prerequisite: Economics 1 and 2, or consent of the instructor.

15. **Industrial Organization and Public Control.** Fall 1985. MR. SHIPMAN.

A study of the structure, performance, and regulation of selected industries. Attention is given to transport, energy, and communications as well as to the manufacturing sector. Cultural and environmental impacts are also explored, and the social responsibilities of business are discussed.

Prerequisite: Economics 1 and 2.

16. **Econometrics.** Spring 1985. MR. GOLDSTEIN.

A study of the mathematical formulation of economic models and the statistical methods of testing them. A detailed examination of the general linear regression model, its assumptions, and its extensions. Applications to both micro- and macro-economics are considered. Though most of the course deals with single equation models, an introduction to the estimation of systems of equations is included. An empirical research paper is required.

Prerequisite: Economics 3 or Mathematics 37, and Mathematics 11, or consent of the instructor. Limited to twenty-five students.

- [17. **The Economics of Population.**]

18. **Economics of Resources and Environmental Quality.** Spring 1985. MR. FREEMAN.

The economic dimensions of environmental quality and resource man-

agement problems faced by the United States and the world. The relationships among population, production, and pollution; the role of market failure in explaining the existence of pollution; evaluation of alternative strategies for pollution control and environmental management; the adequacy of natural resource stocks to meet the future demands of the United States and the world.

Prerequisite: **Economics 1 and 2.**

†19. Underdevelopment and Strategies for Development in Poor Countries. Spring 1986. Ms. DEAN.

The major economic features of underdevelopment are investigated with stress on economic dualism and the interrelated problems of poverty, inequality, and unemployment. The assessment of development strategies stresses key policy choices, such as export promotion versus import substitution, agriculture versus industry, and capital versus labor-intensive technologies.

Prerequisite: **Economics 1 and 2.**

20-29. Contemporary Problems.

Topics vary from year to year. Prerequisites, if any, are determined by the instructor.

†20. The Economics of Agricultural Development and the World Food Problem. Fall 1984. MR. KHAN.

A principal focus on hunger and poverty around the world. Problems of agricultural development in the Third World dealing with technology, human resources, and environmental consequences. Policies designed to encourage agricultural development analyzed with examples drawn from sub-Saharan Africa, Asia, and the Middle East. Global hunger, recent famines in Africa and Asia and the linkage between poverty and starvation. Analysis of the effects of malnutrition and systematic undernutrition on the economic productivity of the victims and of society.

21. Marxian Political Economy. Fall 1984. MR. GOLDSTEIN.

An introduction to the philosophical and methodological foundations of Marxian theory and how to apply this scientific method to analyze the development of the capitalist economy. After a brief introduction to the Marxian method, the basic analytical concepts of Marx's economic theory are developed from a reading of volume I of *Capital* and the Marxian framework is applied to analyze the modern capitalist economy with emphasis on the secular and cyclical instability of the economy and appropriate policy prescriptions.

Prerequisite: **Economics 1 and 2.**

- 22. International Trade and Economic Development.** Spring 1985. Ms. DEAN.

International economic problems and policy issues of developing countries. The role of trade in LDC development and the debate over the type of trade policies which best promote development. The significance of a "new international economic order" for LDC development. Issues considered include: international reform, commodity agreements, foreign aid, and foreign investment.

Prerequisite: Economics 1 and 2.

- 23. Imperialism and Underdevelopment.** Spring 1985. MR. VAIL.

An investigation of the thesis that Third World underdevelopment stems from subordination in capitalism's global division of labor. Theories of imperialism from the age of the Roman empire to the epoch of monopoly capitalism explored, with special emphasis on Marxian and neo-Marxian analyses (Hobson, Lenin, Luxemburg, Baran, Frank, Amin, Fanon, Petras). Claims about "dependency" in the 1980s tested via case studies of key development issues including hunger and rural poverty; the debt crisis and "IMF Imperialism"; the multinational corporation; Third World militarism; demands for a "New International Economic Order"; and Soviet "social imperialism."

Prerequisite: Economics 1.

- 40-49. Advanced Topics in Economic Analysis.**

Courses to be taken in junior and senior year. Limited enrollment.

- 40. Topics in Public Economics.** Fall 1984. MR. FITZGERALD.

Emphasis on theoretical and empirical evaluations of government activities, on both equity and efficiency grounds. Topics include: public choice, income redistribution, analysis of selected government expenditure programs (including social security), behavioral effects of taxation, and recent tax reform proposals.

Prerequisite: Economics 3 and 5.

- 41. The Economics of Public Regulation: Energy, Transport, and Communications.** Spring 1985. MR. SHIPMAN.

History and analysis of regulatory policies used to control a selected group of industries. The rationales for and impacts of regulation, deregulation, and public ownership are examined in the context of changing technologies.

Prerequisite: Economics 3 and 5.

- 43. Advanced Topics in Population and Labor.** Spring 1985. MR. KHAN.

An introduction to some theoretical and empirical analysis in

three different aspects of human resources. The areas to be covered are basic demographic methods, the economics of household behavior, and human capital. A particular emphasis on techniques of analysis to be used in case of limited data for work on human resources.

Prerequisite: **Economics 3** and **5**. Certain mathematics courses may be used to substitute for **Economics 3**.

47. Advanced International Finance. Spring 1985. MR. WOLFE.

Study of theoretical and applied international finance. Theoretical issues concerning the open economy macroeconomic analysis of the balance of payments and exchange-rate determination. This theoretical basis is combined with an institutional and historical review for the purpose of analyzing current international finance issues such as LDC debt and international monetary reform.

Prerequisite: **Economics 6** and permission of instructor.

48. Advanced International Trade. Spring 1986. Ms. DEAN.

Study of theoretical and applied international trade. Theoretical models are developed to explain the determination of the pattern of trade and the gains from trade. This theory is then applied to issues in commercial policy. Issues addressed include the case for free trade *vs.* protection, regional integration, foreign direct investment, and the GATT and trade liberalization.

Prerequisite: **Economics 5** and permission of instructor.

200. Independent Study. THE DEPARTMENT.

Education

PROFESSOR HAZELTON, *Chairman*; LECTURER VLADIMIROFF;
VISITING LECTURER ISAACSON

On page 85 there is a further discussion of careers in teaching.

1. Education in the Twentieth Century. Spring 1985. MR. HAZELTON.

The study of the past two decades as the culmination of expansion in American education and its increasingly contradictory purposes. Assessments of the capacities of schools and colleges and of possible alternative social institutions in this country are studied.

[2. History of American Education.]

[3. Schools and Communities.]

[4. Schooling, Public and Private.]

5. **Teaching.** Fall 1984. Ms. VLADIMIROFF.

A study of what takes place in classrooms: the methods and purposes of teachers, the organization of subjects and curriculum, and the response of students. Regular observations in a variety of classrooms are required.

Prerequisite: Two from Education 1, 2, 3, and 4, or consent of the instructor.

6. **Student Teaching.** Spring 1985. Mr. HAZELTON.

This final course in the Student Teaching sequence requires considerable commitments of time and responsibilities in a local school classroom. Required of all students who want public school certification, it is also open to those with other serious interests in teaching. In addition to daily work in the school, weekly class meetings and writing are required. Grades are awarded on a credit/fail basis only.

Prerequisite: For seniors, with the permission of the instructor, who have completed Education 5 and have had previous voluntary school experience.

20. **Law and Education.** Fall 1984. Mr. ISAACSON.

A study of the intersection of two fundamental social institutions: the impact of law and judicial opinion on major current educational issues. Issues to be discussed are state control over schools, student and teacher rights, race relations, sex discrimination, student classification, special and bilingual education, and school financing.

Prerequisite: Upper-class standing and consent of the instructor.

200. **Independent Study.**

English

ASSOCIATE PROFESSOR BURROUGHS, *Chairman* (FALL 1984); PROFESSOR REDWINE, *Chairman* (SPRING 1985); PROFESSORS COURSEN, GREASON, HALL, AND KASTER; ASSOCIATE PROFESSOR WATTERSON; ASSISTANT PROFESSORS DELAMOTTE, GREENWOOD, AND LITVAK; VISITING ASSISTANT PROFESSOR RENNER; INSTRUCTORS GRIFFIN AND REIZBAUM; DIRECTOR OF THEATER RUTAN

Requirements for the Major in English and American Literature: The major consists of ten courses. At least one semester unit is required from each of four groups: (a) English 41, 43, or 45; (b) 51 or 52; (c) 54, 55, or 57; (d) 61, 62, 64, or 65. Six additional units may be chosen from the foregoing and/or English 1 and 2 (Freshman Seminars, not more than two), 3, 4, 5, 71, 72, 75, 76, 80, 81, 82, 83, 85, 86, 87, 89. In addition, candidates for honors in English are required to write an honors essay and to take a comprehensive examination in the senior year. Exceptions to this program may be arranged by the

department to encourage and accommodate special individual programs such as interdisciplinary majors.

Requirements for the Minor in English and American Literature: The minor consists of at least five of the above courses.

English 1 and 2

Freshman Seminars in English Composition and Literature

Open to freshmen. The freshman English course is called **English 1** in the fall, **English 2** in the spring. Usually there are not enough openings in the fall for all freshmen who want an English seminar. Freshmen who cannot get into a seminar in the fall are given priority in the spring. The main purpose of **English 1** and **2** (no matter what the topic or reading list) is to give freshmen extensive practice in *reading* and *writing* analytically. Each section is normally limited to fifteen students. Discussion, outside reading, frequent papers, and individual conferences on writing problems.

English 1. Fall 1984.

Seminar 1. **The Outsider in American Fiction.** Ms. DELAMOTTE.

A study of the outsider as both creator and subject of American fiction from the late nineteenth century to the present. Readings from Mark Twain, Willa Cather, Tillie Olsen, James Baldwin, Maxine Hong Kingston, Grace Paley, and Gloria Naylor.

Seminar 2. **The Quest.** Ms. GREENWOOD.

An exploration of the motif of the quest in fiction, a motif which some critics contend takes us to the very heart of the fictive presentation of human experience. Discussion of how each differs from the others in its vision of life as a quest and in its presentation of that vision. Works include *The Odyssey*, *Sir Gawain and the Green Knight*, and *Heart of Darkness*.

Seminar 3. **Epics and Mock-Epics.** MR. GRIFFIN.

The heroic tradition and its complications in the modern world. Readings include Homer and Vergil, Dryden and Pope, and selections from Spenser, Milton, and Wordsworth.

Seminar 4. **Nineteenth-Century Fiction: Novellas and Short Stories.** MR. LITVAK.

Close reading of a series of texts chosen for their resistance to received ideas about life and literature. Works by Balzac, Hoffmann, Kleist, Gogol, Hawthorne, and Poe.

Seminar 5. **Satire.** MR. REDWINE.

An examination of some different methods and objects of satire in

works of Sir Thomas More, Shakespeare, Jonson, Voltaire, Swift, Butler, Twain, Huxley, and Orwell.

Seminar 6. Problems of Identity. Ms. REIZBAUM.

An examination of the search for and expression of the "self" in modern fiction, drama, and poetry. Authors include Chopin, Lawrence, Joyce, Eliot, Yeats, Heaney, Gwendolyn Brooks, Atwood, Albee, Williams, and Olsen.

English 2. Spring 1985.

Seminar 1. Shakespeare. Mr. COURSEN.

An examination of themes and patterns in Shakespearean drama. Several papers and a final examination are required.

Seminar 2. Elegy. Mr. GRIFFIN.

Literary treatment of themes of death and loss. Readings include poems by Milton, Dryden, Pope, Gray, Johnson, Wordsworth, Shelley, Keats, and Yeats, among others.

Seminar 3. Satire. Mr. REDWINE.

An examination of some different methods and objects of satire in works of Sir Thomas More, Shakespeare, Jonson, Voltaire, Swift, Butler, Twain, Huxley, and Orwell.

Seminar 4. The Narrative Voice. Ms. REIZBAUM.

An examination of narrative voice through different modes and combinations of modes (epic, picaresque, gothic, etc.) or what it means to tell a story. Authors include Homer, Nashe, Dickens, Poe, Melville, Joyce, Faulkner, Morrison.

English 3 and 4

Survey Course in English Literature

A reading course, with examinations designed to familiarize students with the main currents of English literature, from Anglo-Saxon times to the twentieth century. Limited to seventy-five students each semester with preference given in **English 3** to sophomores, juniors, and AP freshmen (in that order) and in **English 4** to students completing **English 3** and to freshmen completing a freshman seminar.

3. Every fall. Fall 1984. Mr. BURROUGHS.

The course provides a broad introduction, from the beginnings to the end of the eighteenth century. Individual works studied in the context of major stylistic, thematic, and historical developments. Special attention given to specific literary movements, such as the emergence of

metaphysical poetry or Augustan neoclassicism, and to consideration of genre, prosody, and mimesis. Major writers include Chaucer, Shakespeare, Donne, Milton, and Pope.

4. Every spring. Spring 1985. MR. LITVAK.

Emphasizes major stylistic, thematic, and historical developments, from the Romantic movement at the end of the eighteenth century, through the Victorian age, and into modern British poetry. Major writers likely to be considered include Blake, Wordsworth, Shelley, Byron, Keats, Tennyson, Arnold, Browning, Hopkins, Yeats, Eliot, and Auden.

5. The Bible in Literary Focus.

See Religion 3, page 177.

Courses in Writing, Communication, and Theater Arts

10. Public Speaking. Every fall. Ms. KASTER.

Theory and practice of topic selection, audience analysis, research methods, development and organization of ideas, and delivery techniques. Designed for students with little or no experience in public speaking.

Prerequisite: Consent of the instructor.

11. Topics in Communication. Every other fall. Ms. KASTER.

The Group Performance of Literature. Fall 1984.

The study of literature through performance with emphasis on point of view and Burke's dramatistic analysis. Experience in reader's theater and chamber theater formats.

Prerequisite: Consent of the instructor.

12. Argumentation. Every other fall. Fall 1985. Ms. KASTER.

A study of the modes of proof involved in evaluating evidence. Topics include induction, deduction, the Toulmin model, and general semantics.

13. History, Theory, and Criticism of Film. Spring 1985. Ms. KASTER.

The aim is to sharpen the perception of film as art. The history of the media, the major aesthetic theories, and the syntax of film are discussed as they function to clarify the nature of filmic expression. Films of major directors are viewed, including those of Melies, Griffith, Eisenstein, Wiene, Welles, Riefenstahl, DaSica, Fellini, and Bergman.

Students are expected to produce a short film. Enrollment limited to juniors and seniors.

20. **English Composition.** Spring 1985. Ms. GREENWOOD.

Practice in expository and critical writing, with special attention to the preparation, writing, and analysis of student essays. Ordinarily limited to students not planning to take **English 24**.

Prerequisite: Consent of the instructor.

[21. **Elements of Journalism.**]

24. **Advanced Composition.** Spring 1985. Mr. GRIFFIN.

Written work with emphasis on imaginative writing. Ordinarily limited to students who have not taken **English 20**.

Prerequisite: Consent of the instructor.

[25. **Literary Composition.**]

[29. **Playwriting.**]

30. **Acting and Directing.** Every semester. Mr. RUTAN.

A studio class for students interested in the fundamentals of acting and directing.

Prerequisite: Consent of the instructor.

[31. **Set Design.**]

32. **Technical Theater.** Every semester. Mr. RODERICK.

A studio class for students interested in the fundamentals of technical production in the theater.

Prerequisite: Consent of the instructor.

[33. **Asian Rites and Theater.**]

Advanced Courses in English and American Literature

41. **Old English.** Every other year. Fall 1985. Mr. BURROUGHS.

An introduction to Old English language and literature. Readings in the original, supplemented by materials in translation.

43. **Chaucer.** Every other year. Spring 1986. Mr. BURROUGHS.

Emphasis on the *Parliament of Fowls*, *Legend of Good Women*, and *Canterbury Tales*.

45. **Epic and Romance.** Every other year. Fall 1986. Mr. BURROUGHS.

The tradition of the quest as it descends from Vergil. Includes the *Aeneid*, *History of the Kings of Britain*, Chaucer's *Troilus*, *Gawain and the Green Knight*, *Pearl*, and Malory's *Morte D'Arthur*. All Middle English readings done in the original.

51. **Shakespeare I.** Every fall. Ms. GREENWOOD AND Mr. WATTERSON.

A study of Shakespeare's comedies; history plays, particularly the Second Henriad (*Richard II* to *Henry V*); and tragicomedies.

52. **Shakespeare II.** Every spring. Ms. GREENWOOD AND MR. WATTERSON.
A study of the major tragedies, the Roman plays, and the final comedies.
54. **English Literature of the Early Renaissance.** Every other fall. Fall 1985. MR. REDWINE.
A critical study of the literature of the sixteenth century, with emphasis upon Elizabethan nondramatic poetry.
55. **English Literature of the Late Renaissance.** Every other spring. Spring 1986. MR. REDWINE.
A critical study of the literature of the seventeenth century exclusive of Milton, with emphasis on the poetry of Donne, Jonson, and their followers.
57. **Milton.** Every other year. Fall 1984. MR. REDWINE.
A critical study of his chief writings in poetry and prose.
61. **Restoration and Early Eighteenth-Century Literature.** Every other year. Fall 1985. MR. GRIFFIN.
Introduction to the variety and wealth of the period by reading such authors as Bunyan, Congreve, Dryden, Swift, Pope, Defoe, Addison, Gay, Shaftesbury, and Locke.
62. **Late Eighteenth-Century Literature.** Every other year. Spring 1986. MR. GRIFFIN.
Introduction to the "Age of Johnson" by reading such authors as Thomson, Gray, Collins, Fielding, Johnson, Goldsmith, Boswell, and the early Blake, among others.
64. **English Romanticism.** Every other year. Fall 1984. MR. HALL.
The origins, growth, and nature of romanticism, with emphasis on the pre-Romantics and Blake, Wordsworth, and Coleridge. Illustrative parallels in the visual arts, including paintings of Gainsborough, Reynolds, Constable, Blake, and Turner.
65. **Victorian Poetry.** Every other year. Spring 1985. MR. LITVAK.
Readings in the poetry of Tennyson, Arnold, Browning, and Swinburne, and in nonfictional prose by Carlyle, Newman, Mill, Ruskin, Pater, and Wilde.
71. **American Literature I.** Every fall. MR. HALL.
Pre-Civil War fiction. Emphasis on Hawthorne and Melville, and illustrative parallels in the painting of Allston, Cole, Durand, and others.
72. **American Literature II.** Fall 1984. Ms. REIZBAUM.
Works by Chopin, Crane, Cather, O'Connor, Wright, Roth, Frost, Stevens, Moore, Williams, Plath, Roethke.

75. **Twentieth-Century English and American Literature I.** Every other fall. Fall 1985. MR. HALL.

The philosophic and technical bases of the modern schools: Hardy, Conrad, James, Yeats, Eliot, Joyce, Hemingway, Faulkner, and others.

76. **Twentieth-Century English and American Literature II.** Spring 1986. MS. REIZBAUM.

Readings in American and British poetry and fiction, 1900-1970. Such poets as Eliot, Stevens, and Pound; such novelists as Golding, Flannery O'Connor, and Bellow. The list of authors varies from year to year.

80. **Literary Criticism: Definitions and Methods.** Spring 1985. MR. HALL.

An approach to criticism through the definitions of its governing concepts and terms; analysis of selected critical writings and practice in the application of the principles and instruments of criticism.

Prerequisite: Consent of the instructor.

81. **Forms of Narrative.** Every other fall. Fall 1984. MR. LITVAK.

A study of the variety, as well as the underlying affinity, of the stories men and women tell in order to make sense of the world. Readings include examples of different narrative genres (autobiography, the novel, the short story, the parable, the Socratic dialogue, the Freudian case history), and of the major theories of narrative (Marxist, formalist, structuralist, psychoanalytic, deconstructive).

Enrollment limited to forty students.

82. **History of English Drama.** Every other fall. Fall 1984. MR. GRIFFIN.

English drama of the Middle Ages, the Elizabethan and Jacobean periods, the Restoration, and the eighteenth century.

83. **Modern Drama.** Every other spring. Spring 1985. MS. REIZBAUM.

Plays from the late nineteenth and twentieth centuries. The course usually involves continental playwrights (e.g., Brecht, Chekhov) as well as British and American ones.

85. **The English Novel I.** Every other fall. Fall 1985. MS. DELAMOTTE.

History of the English novel from Defoe to Charlotte Brontë, with emphasis on the interplay between realism and romance. Works by Defoe, Fielding, Richardson, Sterne, Radcliffe, Austen, and the Brontës.

86. **The English Novel II.** Every other spring. Spring 1986. MR. LITVAK.

Continuity and change in the novel from the mid-Victorian period to the early twentieth century. Dickens, Trollope, Eliot, Hardy, Joyce, Woolf, and Ford.

87. **Women Writers in English: 1792 to the Present.** Every other fall. Fall 1984. MS. DELAMOTTE.

Fiction and poetry in the double context of literary history and

women's history, with emphasis on questions of special relevance to women writers: their relation to the literary marketplace, their response to the pressures of social and literary conventions, their role in the development of certain genres, their self-image as writers, their accounts of what it meant to be a woman in their societies. Primary readings include such authors as Ann Radcliffe, Charlotte Brontë, Emily Dickinson, Olive Schreiner, Doris Lessing, Alice Walker, Ursula Le Guin. Background readings in literary theory and women's history.

Enrollment limited to forty students.

89. Studies in Literary Genres. Every year.

Lectures, discussions, and extensive readings in a major literary genre: e.g., the narrative poem, the lyric poem, fiction, comedy, tragedy, or the essay.

89, 1. The Earlier Poetry of Chaucer. Fall 1984. MR. BURROUGHS.

A survey of the development of Chaucer's poetry through *Troilus and Criseyde*. Texts include *The Book of the Duchess*, *The House of Fame*, and *The Parliament of Fowls*.

Prerequisite: Consent of the instructor.

89, 2. The Pastoral. Fall 1984. MR. WATTERSON.

Devoted to the study of a significant mode in Western literature, begins with the Bible, Theocritus, Vergil, and Ovid, and concentrates on Renaissance authors, Sidney, Shakespeare, Spenser, Marvell, and Milton. Works by Pope, Wordsworth, Hardy, Lawrence, and selected modern poets also considered.

Prerequisite: Consent of the instructor.

89, 3. The Short Stories and Novels of Joseph Conrad. Spring 1985. MR. HALL.

Prerequisite: Consent of the instructor.

89, 4. Utopian Literature. Spring 1985. MR. REDWINE.

A study of some literary treatments (including satiric ones) of the ideal community. After brief consideration of conventions established by Plato, Cicero, and St. Augustine, a concentration on such works as More's *Utopia*, Bacon's *New Atlantis*, Butler's *Erewhon*, Bellamy's *Looking Backward*, and Huxley's *Brave New World*, as well as selections from such writers as Milton, Swift, Voltaire, Orwell, and Shaw.

Prerequisite: Consent of the instructor.

89, 5. The Bard and the Tube. Spring 1985. MR. COURSEN.

An examination of Shakespeare's translation to television, using the BBC-TV series. Students write frequent reviews of specific

productions, are responsible for class presentations, and must be prepared to attend frequent afternoon "lab sessions" to watch the BBC-TV tapes.

Prerequisite: Consent of the instructor.

[90. Junior Major Tutorial.]

200. Independent Study. THE DEPARTMENT.

Environmental Studies

Administered by the Committee on Environmental Studies

PROFESSOR FREEMAN, *Program Director*

Requirements for the Coordinate Major in Environmental Studies: The major involves the completion of a departmental major (1, below) and advanced work related to environmental matters (2).

1. The departmental major requirement may be satisfied by one of the three following programs; (a) completion of the major requirements in one of the following—biochemistry, biology, chemistry, economics, or government; (b) the coordinate major in geology-environmental studies—**Geology 11, 12, 26**, and three additional courses in geology, **Physics 17, Chemistry 15, 16**, and two courses in mathematics; (c) completion of the major requirements in a department other than those listed above, *provided* that the student's program of studies has the approval of the director as to its environmental content.

2. The following environmental studies courses are required. (These courses may be counted for the environmental studies portion of the student's major and for any nonenvironmental studies requirements.)

a) Six courses related to environmental studies. Relevant courses in any academic division of the curriculum will be identified by the Environmental Studies Committee on a regular basis. Independent study may be included. No more than three of these courses may be in the area of the student's principal major. Areas of the curriculum are defined as follows:

Sciences: biochemistry, biology, chemistry, geology-environmental studies, physics, mathematics, psychology. *Social Sciences:* economics, government, history, sociology-anthropology. *Arts and Humanities:* classics, art, English, German, music, philosophy, religion, Romance languages.

b) Senior course. A culminating course of one semester is required of majors during the senior year. Such courses are multidisciplinary, studying a topic from perspectives of at least two of the three areas of the curriculum. **Environmental Studies 51** normally meets this requirement, as do other courses identified by the director.

1. Physical Processes in the Environment. Spring 1985. MR. GILFILLAN.

Introduction to the natural science of selected environmental topics. The science necessary to discuss certain environmental issues is introduced and then applied to the study of those issues. Topics include natural cycles of matter and energy and the influence of man's activities on the cycles. Perspective is primarily global, although select small-scale systems are examined as examples of larger systems.

[21. Topics in Marine Pollution.]**51. Seminar in Environmental Studies.** Spring 1985. MR. GILFILLAN.

This course deals with the various political, sociological, and environmental issues involved in disposal of toxic waste. Generation, treatment, and disposal of toxic waste will be considered. Guests with differing points of view on the toxic waste question will speak about alternatives to the disposal of toxic wastes. The conclusion of the course will be a "moot court" proceeding in which groups of students will argue various viewpoints regarding disposal of toxic waste.

Geology

PROFESSOR HUSSEY, *Chairman*

Students contemplating advanced study in geology should consult with the chairman of the department as soon as possible. They should plan a joint major between geology and chemistry, physics, biology, or mathematics, or the geology-environmental studies coordinate major. **Geology 11** and **12** should be taken during the freshman year. By the end of the junior year **Mathematics 11, 12**, two semesters of chemistry, and one semester of physics should be completed. A one-week field trip is taken during the second week of the spring vacation to illustrate the various aspects of the geology of the northern Appalachians. All coordinate, joint, and interdisciplinary geology majors are expected to participate in at least one of these trips during the junior or senior year.

Interdisciplinary Major: The department participates in an interdisciplinary program in geology and physics. See page 148.

Requirements for the Minor in Geology: The minor consists of two courses chosen from **Geology 8, 11, or 12**, and two courses chosen from **Geology 21, 22, 23, or 26**.

8. Geology of Ocean Basins and Margins. Spring 1985 and 1987.

Examines the processes of erosion and sedimentation of shoreline and near-shore environments, emphasizing the delicate equilibrium of these environments; the morphology of and physical processes operating in the ocean basins; the origin and evolution of ocean basins in light of

recent research in plate tectonics; the paleontologic and climatic record recorded in ocean sediments. Three hours of lecture per week.

No previous experience in science courses will be assumed.

[10. **Metal Mining and Its Environmental Impact.**]

11. **Introduction to Physical Geology.** Every fall.

Lectures devoted to the composition and structure of the earth and the dynamic equilibrium processes that shape the surface of the earth. Field and indoor laboratory studies include the recognition of common rocks and minerals, the interpretation and use of topographic and geologic maps, and dynamics of processes that shape our landscape. A one-day trip is taken to York County to examine evidence for glaciation, recent sea level changes, structures and types of metamorphic rocks, and sequence of intrusion of four major magma series. Three lectures and three laboratory hours each week.

No previous experience in science courses will be assumed.

12. **Introduction to Historical Geology.** Every spring.

Lectures devoted to a study of the principles involved in the interpretation of geologic history as deciphered from the rock record and a review of present knowledge of the evolution of the earth and its inhabitants. Laboratory work includes the recognition of fossils and their modes of preservation, interpretation of geologic maps, and a summary of the geologic history of the principal tectonic belts of North America. A three-day field trip is taken in the spring to illustrate important aspects of the geologic history of the southern and central coastal Maine area. Three lecture and three laboratory hours each week.

Prerequisite: **Geology 11** or consent of the instructor.

[14. **Earth Materials.**]

21. **Optical Mineralogy and Crystallography.** Fall 1985 and 1987.

Lectures devoted to morphological and X-ray crystallography, crystal chemistry, and optical mineralogy of the common rock-forming minerals. Laboratory work includes the examination and identification of minerals in thin section and as grains in immersion oil, using the polarizing microscope; morphological crystallography; and X-ray diffraction techniques. Three lecture hours and one three-hour laboratory each week.

Prerequisite: **Chemistry 15** or **Geology 8** or **11**.

22. **Petrology.** Spring 1986 and 1988.

The classification, description, and genesis of the common rock types. Three hours of laboratory work each week devoted to the identification

of rocks in hand specimen and examination of thin sections with the use of the polarizing microscope.

Prerequisite: **Geology 21**.

23. Structural Geology. Fall 1984 and 1986.

The primary and secondary structures of rocks, and the interpretation of crustal deformation from these features. Laboratory work includes structural interpretation of geologic maps, construction of cross sections, and the use of stereographic projections and orthographic constructions in the solution of structural problems and presentation of data. Three lecture hours and three laboratory hours each week.

Prerequisite: **Geology 11** or **Geology 8** with consent of the instructor.

26. Geomorphology. Spring 1985 and 1987.

The concepts of land form development and evolution, emphasizing modern quantitative methods of study, interpretation, and applications to environmental planning. Three lecture hours and three laboratory hours each week.

Prerequisite: **Geology 11**.

200. Independent Study.

German

PROFESSOR HODGE, *Chairman*; ASSOCIATE PROFESSORS CAFFERTY AND CERF; ASSISTANT PROFESSOR BEEBEE; TEACHING FELLOW WAGNER

Requirements for the Major in German: The major consists of any six courses from **German 13** through **22** (one semester of **German 5-6** may be included in this group), or any five courses from **German 13** through **22** and an independent study approved by the department.

Requirements for the Minor in German: Any four courses of which two must be in the language (**German 1** through **22**).

†1, 2. Elementary German. Every year. Fall 1984. Ms. CAFFERTY. Spring 1985. MR. HODGE.

Three hours a week of training in grammar, composition, and reading. One hour of conversation/drill with teaching assistant or teaching fellow. Language laboratory also available.

†3, 4. Intermediate German. Every year. Fall 1984. MR. HODGE. Spring 1985. MR. BEEBEE.

Three hours a week of reading, composition, and review of grammar. One hour of conversation/drill with teaching assistant or teaching fellow. Language laboratory also available.

Prerequisite: **German 2** or equivalent.

- †5, 6. **Advanced German Language.** Every year. Fall 1984. MR. BEEBEE.
Spring 1985. MS. CAFFERTY.

Designed to increase oral fluency, compositional skills, and understanding of spoken German. Stylistics and idiomatic usages may be emphasized.

Prerequisite: German 4 or equivalent.

8. **Advanced Translation: German to English.** Spring 1985. MR. BEEBEE.

For students of all disciplines who expect to do specialized reading or research work in German. Emphasis on discrepancies between grammar and style, various approaches to vocabulary learning, and "decoding" difficult structures. Readings from areas of general knowledge. As a final project each student translates a reading selection from his own subject area.

Prerequisite: German 4 or equivalent.

- †13. **The Development of Literary Classicism.** Fall 1985. MR. BEEBEE.

Beginning with the reaction against the Age of Reason and continuing into the later works of Goethe and Schiller.

Prerequisite: German 4 or equivalent.

- †14. **The Romantic Movement.** Spring 1986. MR. CERF.

Its literary philosophy, several schools of thought, and preferred genres, including consideration of such representative or influential figures as Tieck, A. W. and F. Schlegel, Kleist, Arnim, Brentano, Chamisso, Eichendorff, E. T. A. Hoffmann, and Schopenhauer.

Prerequisite: German 4 or equivalent.

- 15, 16. **Literature of the Nineteenth and Twentieth Centuries.** Fall 1984. MR. HODGE. Spring 1985. MS. CAFFERTY.

German literature ca. 1830-1945. Such authors as Hebbel, Storm, Meyer, Keller, Hauptmann, Hofmannsthal, Mann, Kafka, and Brecht are included.

Prerequisite: German 4 or equivalent.

17. **German Literature since 1945.** Fall 1984. MS. CAFFERTY.

Representative postwar authors from East and West Germany, Austria, and Switzerland.

Prerequisite: German 4 or equivalent.

- †18. **The Short Prose Form.** Fall 1985. MR. HODGE.

Unique theory, form, and content of the German *Novelle* as they have developed from Goethe to the present.

Prerequisite: German 4 or equivalent.

- †22. **Seminar in Aspects of German Literary History.** Every spring.

Work in a specific area of German literature not covered in other

departmental courses, e.g., individual authors, literary movements, genres, cultural influences, and literary-historical periods. *This course may be repeated for credit with contents changed.*

Prerequisite: German 4 or equivalent.

Spring 1985: **Classical Themes in German Drama.** MR. HODGE.

The modernization of classical themes in the plays of Goethe, Schiller, Kleist, Grillparzer, Hebbel, and others is analyzed. Emphasis on well-founded but individual interpretation.

†31. **German Literature in English Translation.** Every fall.

This course may be repeated for credit with contents changed.

Fall 1984. **Three Challenges: Nietzsche, Freud, and Marx.** MR. BEEBEE.

An examination of the thought and influence of three authors whose ideas represent radical changes in traditional concepts of the self, of morality, and of the structure of social relations. Although the achievement of each figure is difficult to categorize, extending to nearly all disciplines in the humanities and social sciences, particular attention is paid to the influence of Nietzsche, Freud, and Marx on literature and the arts. Besides the primary works of each thinker, there is also an examination of works of art based upon or illuminative of their ideas.

†32. **Mythologies of Europe.** Spring 1986. MR. HODGE.

Myths, legends, sagas, and other folk literature of the Germanic, Celtic, and Finno-Ugric traditions, e.g., the Prose and Poetic Eddas, Song of the Volsungs, Beowulf, Lay of the Nibelungs, the Mabinogian, the Cycle of Finn, the Cycle of Ulster, the Kalevala. Where possible and desirable, comparisons may be drawn with other mythologies; mythological and legendary material may be supplemented by relevant folkloric, Arthurian, and semihistorical literature. In English.

200. **Independent Study.** THE DEPARTMENT.

Government and Legal Studies

PROFESSOR MORGAN, *Chairman*; PROFESSORS DONOVAN, POTHOLM, AND
RENSENBRINK; ASSISTANT PROFESSORS HUSKEY AND SPRINGER;
INSTRUCTOR MCCONNELL

Requirements for the Major in Government and Legal Studies: Courses within the department are divided into five fields: American government (Government 5, 6, 10, 13, 14, 16, 18, 30-31, 40, and 43), comparative politics (Government 12, 15, 23, 25, 26, 27, 28, 29, and 41), political theory (Government 16, 17, 19, 20, 21, 25, and 40), international relations (Government 7, 8, 12, 15, 18, 26, 27, 28, and 42) and public policy (Government 10, 13, 14, 15,

17, 18, 30-31, 40, and 43). Every major is expected to complete an area of concentration in one of these fields.

The major consists of one Level A course, six Level B courses, and one Level C course, distributed as follows:

1. A field of concentration, selected from the above list, in which at least two Level B courses and one Level C course are taken.
2. At least one Level B course in each of three fields outside the field of concentration.

Students seeking to graduate with honors in government and legal studies must have an honors average within the department. Each must prepare an honors paper, which is normally the product of two semesters of independent study work, and have that paper approved by the department. One semester of independent study work may be counted toward the eight-course departmental requirement and the three-course field concentration.

Requirements for the Minor in Government and Legal Studies: A minor in government and legal studies will consist of one Level A course and four level B courses from three of the departmental subfields.

Level A Courses

Government I

Introductory Seminars

Topics and course requirements will vary from seminar to seminar and year to year according to the interests of the instructor. All are designed to provide an introduction to a particular aspect of government and legal studies. Students are encouraged to analyze and discuss important political concepts and issues, while developing research and writing skills.

Enrollment is limited to twenty-five in each seminar. Freshmen are given first priority; sophomores are given second priority. If there are any remaining places, upperclassmen may be admitted with consent of the instructor.

Fall 1984

Seminar 1. The Pursuit of Peace. MR. SPRINGER.

Seminar 2. Congress and the Executive: The Politics of Shared Power. MR. DONOVAN.

Spring 1985

Seminar 3. Comparative Political Systems. MR. HUSKEY.

Seminar 4. Political Pathologies of the Twentieth Century. MR. RENSENBRINK.

Seminar 5. Justice, Community, and Democratic Theory. MR. MCCONNELL.

[2. Introduction to International Relations.]**3. Introduction to American Politics.** Fall 1984. MR. MORGAN.

Emphasis on the national government and the making of public policy. Examination of the Constitution, Supreme Court, presidency, Congress, political parties and interest groups, bureaucracy, and national budget-making. Whenever possible an attempt is made to relate the study of basic institutions to the development of current issues of public policy.

Level B Courses

Level B courses are designed generally for students with a previous background in government and legal studies. All require that a student have taken a Level A course, unless otherwise noted, or the consent of the instructor. Course requirements will vary from course to course, but most of the courses at this level adopt a lecture format.

[5. Local Governments.]**6. Law and Society.** Spring 1985. MR. MORGAN.

An examination of the American criminal justice system. Although primary focus is on the constitutional requirements bearing on criminal justice, attention is paid to conflicting strategies on crime control, to police and prison reform, and to the philosophical underpinnings of the criminal law.

7. International Law. Fall 1984. MR. SPRINGER.

The modern state system, the role of law in its operation, the principles and practices which have developed, and the problems involved in their application.

8. International Organization. Spring 1985. MR. SPRINGER.

The development of international institutions, including the United Nations and the European Community.

[10. The American Presidency.]**12. Advanced Comparative Government.** Fall 1984. MR. RENSENBRINK.

The Soviet Union and China: a comparison of two Communist regimes.

13. Elections, Parties, and Interest Groups in America. Fall 1984. MR. MCCONNELL.

An exploration of the United States, past and present, from the perspective of electoral behavior, as well as an examination of the role of parties and interest groups in American politics. Concentration on presi-

dential voting, but some attention is also given to congressional voting, campaign techniques, media influence, and on the relations between parties, interest groups, and other political institutions.

14. The Policy-Making Process. Fall 1984. MR. DONOVAN.

The policy-making process in government with emphasis on executive-legislative relations, the roles of Congress and the presidency, and the basic problem of responsible formulation of public policy in the United States. Recent British experience also considered.

[15. Advanced International Politics: Global Crises.]

16. Development of American Political Thought. Spring 1985. MR. DONOVAN.

American political thought from the seedtime of the Republic through the present. Emphasis on an analysis of major American thinkers from Madison to John Dewey. Concludes with an examination of the contemporary dialogue of American liberalism, conservatism, and radicalism.

Prerequisite: Junior- or senior-year standing, or consent of the instructor.

17. Approaches to Political Science. Fall 1984. MR. McCONNELL.

Considers different approaches to political analysis, with some attention to critical (largely European) theories about the problems of industrialized democracies and the (largely American) response to the critical theories: pluralism. There will be a strong focus on the seminal normative and empirical ideas in political psychology, political sociology, and political economy on which contemporary debate about political issues is based.

Prerequisite: At least one course in government, social science, or philosophy, or consent of instructor.

18. American Foreign Policy: Its Formulation and the Forces Determining Its Direction. Spring 1985. MR. SPRINGER.

The major theories concerning the sources and conduct of American foreign policy since World War II. The approach emphasizes the interrelationship of political, social, and economic forces which shape United States diplomacy.

Prerequisite: Any Level A course or sophomore year standing.

[19. Political Theory: The Foundations and Early Critique of Modern Western Thinking about the State.]

20. History of Western Political Theory: Modern to Contemporary Thought. Spring 1985. MR. McCONNELL.

A continuation of **Government 19**. This course surveys the history of

political theory from the mid-nineteenth century to the present. Theorists studied may include Hegel, Marx, Mill, Nietzsche, and other modern Europeans as well as a number of more contemporary thinkers, such as Marcuse, Oakeshott, Camus, and Rawls.

21. Political Theory in the Twentieth Century: Minorities and New Theories of the State. Fall 1984. MR. RENSENBRINK.

Themes include a multi-racial society, feminism and the state, the political implications of class theory, communalism and the state, and the federal principle applied on a world scale. The aim is to formulate a provisional concept of the heterogeneous state. A world-wide variety of twentieth-century authors will be selected for study.

For the fall of 1984 only, the course is limited to 25 students. Open to majors and non-majors, though preference is given to students who have taken other theory courses in the department. Offered in alternate years beginning in the fall of 1984.

†23. African Politics. Fall 1984. MR. POTHOLM.

An examination of the underlying political realities of modern Africa. Emphasis on the sociological, economic, historical, and political phenomena which affect the course of politics on the continent. While no attempt is made to cover each specific country, several broad subjects, such as hierarchical and polyarchical forms of decision making, are examined in depth. There is a panel discussion with African students and scholars at the end of the course.

25. Political Analysis and the Forces of Change. Fall 1984. MR. POTHOLM.

Study of the process of political development including an analysis of elite groups as crucial variables in the modernization process, models and patterns of political development, dysfunctional factors impeding modernization, and aspects of political stagnation and devolution. A variety of material is used, including fiction, nonfiction, and films.

Enrollment limited to fifteen students with written consent of the instructor.

28. Soviet Foreign Policy. Fall 1984. MR. HUSKEY.

Examines Soviet conduct in world affairs from the October Revolution of 1917 to the present. The development of Soviet perceptions, motivations, and modes of behavior in international relations will be analyzed against the background of the changing world order and the maturing system of state socialism in the Soviet Union.

†29. Soviet Politics. Spring 1985. MR. HUSKEY.

An introduction to Soviet politics and society through a study of the development of the Soviet system from the October Revolution to the present and an examination of the components of the contemporary

political and social order. Some attention will be given to the debate over the nature of Soviet socialism.

***30-31. American Constitutional Law.** Every year. MR. MORGAN.

Constitutional principles in the United States. The case method is used in the presentation of material.

Prerequisite: Junior- or senior-year standing, or consent of the instructor.

Level C Courses

Level C courses provide seniors (and juniors, with the consent of the instructor) an opportunity to do advanced work within their fields of concentration. This may be done in the context of a seminar or through independent study with a member of the department, or through the honors seminar.

40, 1. Advanced Seminar in Political Theory: Energy Policy and the Modern State. Spring 1985. MR. RENSENBRINK.

†41, 1. Advanced Seminar in Comparative Politics: Communist Legal Systems. Fall 1984. MR. HUSKEY.

43, 1. Advanced Seminar in American Politics: Cold War Decision Making. Spring 1985. MR. DONOVAN.

200. Independent Study. THE DEPARTMENT.

History

PROFESSOR HOWELL, *Chairman*; PROFESSORS LEVINE, NYHUS, AND WHITESIDE;
ASSOCIATE PROFESSOR KARL; ASSISTANT PROFESSORS JONES, McMAHON,
NEWBURY, SMITH, AND STAKEMAN; LECTURER JACOBS

Requirements for the Major in History: The departmental offerings are divided into the following fields: Europe to 1715, Europe since 1500, Great Britain, United States, East Asia, Africa, and Latin America. In meeting the field requirements, courses in Europe between 1500 and 1715 may be counted toward early or modern Europe but not toward both of them. At least one field must be in East Asia, Africa, or Latin America. Students may, with departmental approval, define fields which are different from those specified above.

The major consists of eight courses, distributed as follows:

1. A primary field of concentration, selected from the above list, in which four or more courses are taken. One of the courses must be numbered in the 50s, selected with departmental approval, in which a research essay is written.

2. Two supplemental fields, in each of which two courses are taken.

Economics 8 may be counted toward the history major.

All history majors seeking departmental honors will enroll in at least one semester of the Honors Seminar (**History 60, 61**). Its primary requirement is the research and writing of the honors thesis. In addition, the seminar is to provide a forum in which the students, together with the faculty, can discuss their work and the larger historical questions that grow out of it.

With departmental approval a student may offer for credit toward the history major college-level work in history at other institutions. This work may represent fields other than those that are available at Bowdoin. A student who anticipates study away from Bowdoin should discuss with the department, as early in his or her college career as possible, a plan for the history major which includes work at Bowdoin and elsewhere.

The freshman-sophomore seminars listed under **History 3** are not required for the major, but one such seminar may count toward the required eight courses.

Before electing to major in history, a student should have completed or have in progress at least two college-level courses in history.

History majors are encouraged to develop competence in one or more foreign languages and to use this competence in their historical reading and research. Knowledge of a foreign language is particularly important for students planning graduate work.

Each major should select a departmental adviser. A student should plan, in consultation with his or her adviser, a program that progresses from introductory to advanced levels. The courses numbered in the 50s presuppose a reasonable background understanding. They are open with the consent of the instructor to history majors and other students, normally upper-classmen.

Enrollment in a problems course is limited to fifteen students. Each freshman-sophomore seminar (**History 3**) is limited to twenty. Other history courses are limited to seventy-five students each.

Requirements for the Minor in History: The minor consists of five courses, three to be taken in a field of concentration chosen from the list specified by the department for a major. The remaining two are to be in a subsidiary field selected from the same list.

East Asian Studies Concentration: Majors in history may elect the East Asian Studies Concentration, which consists of the following requirements: four courses in East Asian history, including at least one research seminar; two courses in a field of history other than East Asian; and four semesters of Chinese language.

Foreign study for students interested in East Asian studies is highly recommended. Established programs in Hong Kong, Taiwan, Japan, and the

People's Republic of China are available. Consult the instructor in East Asian history for information about various programs. Completion of the language requirement for this concentration must, at present, be undertaken at another institution.

†1. **Europe from Ancient Greece through the Reformation.** Fall 1984. MR. NYHUS.

An introduction to early Western civilization beginning with Greece and Rome and continuing to the Reformation era. The course focuses on special problems (e.g., the crisis of the late Roman republic) in each era and analysis of the various methodologies which help to explain those problems.

2. **History of Modern Western Civilization.** Fall 1986. MR. HOWELL.

An introduction to modern Western civilization beginning with the evolution of the modern state system and tracing the development of nationalism, secularism, European expansion, and the conflict of ideologies. The course is also designed to be an introduction to the study of history and a series of short papers aims at the analysis of the nature of historical writing and methodology.

3. **Freshman-Sophomore Seminars.**

The following seminars are introductory in nature. They are designed for freshmen and sophomores who have little background in history generally or in the period and area in which the particular topic falls. Enrollment is limited to twenty students in each seminar.

Objectives are (a) to cover the essential information relating to the topic, together with a reasonable grounding in background information; (b) to illustrate the manner in which historians (as well as those who approach some of the topics from the point of view of other disciplines) have dealt with certain significant questions of historical inquiry; and (c) to train critical and analytical skills.

The seminars are based on extensive reading, class discussion, oral reports, two or three short critical essays, and an examination.

1984-1985

†Seminar 3, 1. **Traditional China.** Fall 1984. MR. SMITH.

Designed to teach the successful reading of primary sources: how to locate an argument, identify the author's assumptions, and draw implications from a text. After introductory lectures on the history of late imperial China (960-1911), students will read a wide variety of translated documents, including diaries, collections of religious precepts, tenancy agreements, etc. Frequent one-page papers.

- †Seminar 3, 2. **Russia through the Eyes of Memoirists.** Spring 1985. MR. KARL.

Deals with the problems of using memoir and travelogue literature. Not a course in the history of Russia. Frequent short papers.

- †Seminar 3, 3. **The Poor and Society.** Fall 1985. MR. LEVINE.

A comparative look at how four Western societies—Germany, Denmark, England, and the United States—have responded to “the poor,” what characteristics they perceive in poor people, and how they have conceptually and institutionally dealt with the issues. Readings primarily from legislation and novels. Each week students write one or two pages on the reading. These papers are corrected and commented on but not graded.

Prerequisite: Consent of the instructor.

- †Seminar 3, 4. **Jewish Life in Medieval Europe.** Fall 1985. MR. NYHUS.

This seminar will view Western European life through the eyes of the Jewish minority. Students will read the writings of the Jewish people and writings about Jewish people. Social theories which seek to explain the relation between a majority and minority culture will be examined. Each student will write several short essays.

- †4. **Greece and Rome.** Spring 1985. MR. NYHUS.

A survey of the political, economic, and social history of the classical world of the West. In addition to standard historical works, the readings include representative samples of historical and literary texts such as Herodotus, Thucydides, Livy, Aeschylus, Sophocles, and Cicero.

- †5. **Europe in the Middle Ages, 1050-1300.** Fall 1985. MR. NYHUS.

A survey covering political and social institutions as well as intellectual and cultural movements of twelfth- and thirteenth-century Europe.

- †6. **Europe 1517-1715: Reformation to Louis XIV.** Spring 1986. MR. KARL.

The Reformation serves as introduction to the social, political, and intellectual development of continental Europe to the death of Louis XIV. No prior knowledge is expected, but a prior college-level history course is recommended.

- †7. **Europe 1715-1848: Enlightenment, Revolution, and Napoleon.** Fall 1984. MR. KARL.

A survey of continental European evolution from the death of Louis XIV to the revolutions of 1848, with focus on the French Revolution and its role in European development.

- †8. **Germany 1900-1945.** Fall 1985. MR. KARL.

After a brief survey of German development, the course focuses on

the reasons for the rise of National Socialism and particularly on the nature of the Nazi dictatorship.

†11. **Renaissance Europe.** Spring 1985. MR. NYHUS.

A close study of the politics and culture of the period. Consideration of the historical problem of a renaissance.

†12. **The Intellectual History of the Renaissance and Reformation.** Spring 1986. MR. NYHUS.

Investigation of the ideologies of the Renaissance and Reformation in their social settings. Authors from the fourteenth through the sixteenth centuries are studied to determine the ways in which they reflected and shaped their societies. Authors considered include Dante, Petrarch, Marsiglio, Salutati, Machiavelli, Castiglione, Erasmus, More, Luther, Calvin, Rabelais, Montaigne, and Bodin.

Prerequisite: One previous course in history or government, or consent of the instructor.

13. **History of Russia to 1825.** Spring 1985. MR. KARL.

A broad survey beginning with medieval Russia but concentrating on the rise of Muscovy, Peter the Great, and the development of autocracy and serfdom down to the Decembrist revolt.

†14. **History of Russia: 1825 to the Present.** Spring 1986. MR. KARL.

Begins with the reign of Nicholas I and focuses mainly on the long-term coming, course, and aftermath of the Revolution of 1917. No prior knowledge of European history is expected.

15. **History of England to 1550.** Spring 1986. MR. HOWELL.

A survey of the political, cultural, intellectual, social, and economic aspects of English life from pre-Roman times to the Reformation.

16. **History of England from the Sixteenth to the Nineteenth Century.** Fall 1984. MR. HOWELL.

A survey of political, cultural, intellectual, social, and economic developments in England from Elizabeth to the death of George III.

17. **History of England from 1800 to the Present.** Spring 1985. MR. HOWELL.

A survey of the cultural, intellectual, political, constitutional, social, and economic development of England.

†[18. **The Renaissance and Reformation in Northern Europe.]**

19. **The British Empire and Commonwealth.** Fall 1984. MR. HOWELL.

An introduction to certain continuous themes in British imperial history with an emphasis on the period from 1783 to the present. The course is comparative in approach and from time to time deals with

colonies, empires, and policies of other nations than the British in order to provide a general examination of colonialism, imperialism, race, and overseas settlement.

20. Topics in British Imperial and Commonwealth History. MR. HOWELL.

The Evolution of British India. Fall 1986.

Analysis of the British presence in India from the formation of the East India Company until the transfer of power and the creation of dominion status for India and Pakistan. Cultural interactions as well as political and economic relationships are emphasized.

21. Interpretations of American History. Fall 1984. MR. LEVINE.

Consideration of four or five topics from the American Revolution to the present, all related to social change. How historians have disagreed with each other, the nature of historical inquiry, and the relationship between past and present. Readings include Hartz, *The Liberal Tradition in America*; Lowi, *The End of Liberalism*; Hamilton, *Report of the National Bank*; and Collingwood, *The Idea of History*. Students read different works on the same subject and in class discuss what ways the historians agree and disagree with each other, and why.

22. Social History of Colonial America, 1607-1763. Fall 1984. MS. McMAHON.

A study of the founding and growth of the British colonies in North America. Explores the problems of creating a new society in a strange environment; the effects of particular goals and expectations on the development of the thirteen colonies; the gradual transformation of English, African, and Indian cultures; and the later problems of colonial maturity and stability as the emerging Americans outgrow the British imperial system.

23. American Society in the New Nation, 1763-1840. Spring 1985. MS. McMAHON.

A social history of the United States from the Revolutionary era through the Age of Jackson. Topics include the social, economic, and ideological roots of the movement for American independence; the struggle to determine the scope of the Constitution and the shape of the new republic; the emergence of an American identity; and the diverging histories of the North, South, and West in the early nineteenth century.

24. The American Civil War. Spring 1986. MR. WHITESIDE.

Southerners and the South, Southerners and the nation from 1830 through the secession movement and the Confederacy. Was there an

"irrepressible conflict" of which the fighting from Fort Sumter to Appomattox was the ultimate expression? Northerners and the Union cause. Events, leaders, and ideas are studied with special reference to the major conflicting interpretations of the causes, course, and consequences of the war. The views of the conflict held by later generations and first stirrings of the "new" South are explored.

25. American Society and Thought, 1865-1917. Fall 1984. MR. WHITESIDE.

The abrupt change in America after 1865; industrialization, immigration, the growth of cities. Social criticism, reform, education, religion. Some attention paid to literature. An effort to identify points of comparison and contrast between America and other industrializing countries.

26. Foreign Relations of the United States since 1898. Spring 1985. MR. WHITESIDE.

The changing role of the United States in world affairs. Imperialism and its opponents; the two World Wars; the ambivalent attitudes toward international organizations; hemispheric relations; containment and the cold war; Asian policy; Korea and Vietnam; the Middle East. An effort to determine the interaction between domestic concerns and the conduct of foreign policy.

27. The United States since 1945. Fall 1985. MR. LEVINE.

Consideration of social, intellectual, political, and international history. Topics include the cold war; the survival of the New Deal; the changing role of organized labor; Keynesian, post-Keynesian or anti-Keynesian economic policies; the urban crisis. Readings common to the whole class and the opportunity for each student to read more deeply in a topic of his or her own choice.

28. The United States and Asia since 1789. Fall 1985. MR. WHITESIDE.

The American participation in efforts to "open" China and Japan. Economic activity. The missionaries. Diplomatic contacts. The war with Spain and the acquisition of the Philippines. The Open Door notes. World War I and its Asian sequel in the 1920s. America and the struggle between Nationalists and Communists in China. Pearl Harbor and World War II. Taiwan and mainland China since 1949. America and Japan since the occupation. Korea. Southeast Asia and the Vietnam conflict.

29. The Civil Rights Movement. Fall 1984. MR. LEVINE.

Concentrating on the period from 1954 to 1970, a major point of this course will be to show how various individuals and groups have been pressing for racial justice for decades. Special attention paid to

social action groups ranging from the NAACP and SNCC, and to important individuals, both well-known (Booker T. Washington) and less well known (John Doar). Readings mostly in primary sources.

30. Women in American History. Fall 1984. Ms. McMAHON.

A social history of American women from the colonial period to the present. Examines the changing roles and circumstances of women in both public and private spheres, focusing on family responsibilities, paid and unpaid work, education, ideals of womanhood, women's rights, and feminism. Class, ethnic, religious, and racial differences—as well as common experiences—are explored.

†31. History of West Africa. Fall 1984. MR. NEWBURY.

An introduction to West African history from the Sudanic empires to the present. Focus on topics such as slavery; external and regional trade networks; Islam and the Islamic reform movements; and local-level political, economic, and religious transformations under colonial rule. Examination of African initiatives and external influences, historical continuities and regional diversity, and thematic trends and intellectual approaches to understanding the West African past. Readings include novels by West African authors relating to historical subjects and social issues as well as more conventional sources.

†32. Colonial Latin America: Ancient Americans, Conquest, and Colonialism. Fall 1984. Ms. JONES.

Survey of the history of Latin America from the prehispanic era, through the conquest of the Americans by Spain and Portugal, the establishment of colonial societies, up to the independence movements of the early nineteenth century.

[†33. Afro-American Religion and Its Music: Redemption Songs.]

35. Chinese Society in Ch'ing Times. Fall 1984. MR. SMITH.

An introduction to premodern China, focusing on the first half of the Ch'ing dynasty (1644-1911). Discussion of societal relations and their justifications: state organization, human interaction, ideology. Culminates in a day-long simulation of elite society in the eighteenth century, with students taking roles from merchant and local gentry to magistrate and emperor.

36. Introduction to Chinese Thought. Spring 1985. MR. SMITH.

An introduction to the competing schools of Chinese thought in the time of Confucius and his successors. Lectures provide background in the developments of Chou dynasty society (ca. 1000-222 B.C.), but most work takes place in conference discussions of the philosophers' original texts and in a series of related short papers.

37. Modern China. Spring 1986. MR. SMITH.

China from 1800 to the present with an emphasis on social and intellectual history. Studies the confrontation with Western imperialism, the fall of the empire, the rise of Communism, and the People's Republic.

†38. The Foundations of Tokugawa Japan. Fall 1985. MR. SMITH.

Addresses problems in the creation and early development of Tokugawa (1600-1868) state and society: the transformation of samurai from professional warriors to professional bureaucrats, the Confucian challenges to Buddhism, and the unanticipated growth of a quasi-autonomous urban culture.

[39. An Introduction to Precolonial Africa.]

40. Colonialism in Africa. Fall 1985. MR. STAKEMAN.

Selected topics in the history of Africa since European colonization, including Africa on the eve of colonization, African participation in the advent of colonialism, the economic roots of colonialism, the establishment of colonial rule, African resistance to colonial rule, colonial administration, the emergence of new African political elites, the colonial economy, religious reactions to colonialism, the growth of political nationalism, violence as a political process, decolonization, the concept of underdevelopment, and assessments of the colonial experience.

†41. Islam in Africa. Fall 1985. MR. STAKEMAN.

This course will focus on Islam as a theological system and as an ideology which orders social relations in African societies. The course will place particular emphasis on the role of women in African Islamic societies. Other topics include Islamic diasporas in Africa, the syncretization of African and Islamic beliefs, Islamic minorities in non-Islamic societies, Islam and underdevelopment, Islamic socialisms, and Islam in the modern world.

†42. History of East Africa: The Last Hundred Years. Spring 1985. MR. NEWBURY.

The historical impact of British rule in the three countries of East Africa was radically different in each case. In part this stemmed from different constitutional forms and the different vision of colonial society which characterized each national unit. Equally important were the local-level influences that conditioned the impact on and response of African societies to colonial policy. The themes considered include missionary influences, forms of African collaboration and resistance, the presence or absence of settler societies, and economic changes at the local level.

†43. The Political Economy of Southern Africa. Spring 1986. MR. STAKEMAN.

The racial turmoil in southern Africa has been a matter of global

concern for some years. This is an introduction to the political and economic processes that have shaped black-white relations in the region and an examination of the international implications of continued unrest.

- †44. **Transformations in Peasant Agriculture in Colonial Africa.** Spring 1985. MR. NEWBURY.

The current food crisis in Africa can be directly related to the types of rural transformations that occurred under colonial rule and often continued in the post-colonial period. A study of the "roots of rural poverty" by looking at the structural components to food production in colonial Africa and examining how these have changed. Case studies include examples of land alienation, labor recruitment, and imposed "cash-crop" cultivation of land.

Prerequisite: Prior work in African history.

- †45. **History of Mexico.** Fall 1984. Ms. JONES.

Beginning with the Aztec empire and ending with discussion of the modern nation, an exploration of the consolidation of the Spanish colonial order, the roots of nationality, the economic development in the first century of independence, and the causes and consequences of the Revolution of 1910.

46. **Family and Community in American History.** Spring 1985. Ms. McMAHON.

An examination of the American family as a functioning social and economic unit within the community from the colonial period to the present. Topics include the purpose of marriage; philosophies of child-rearing; demographic changes in family structure; organization of work and leisure time; relationships between nuclear families and both kinship and neighborhood networks; and the effects of industrialization, urbanization, immigration, and social and geographic mobility on patterns of family life.

- †47. **Modern Latin America.** Spring 1985. Ms. JONES.

Topical survey of modern Latin America, including discussion of problematic early nation building in nineteenth century, integration and subordination to new world conditions of the twentieth century. Revolution is a topic of special study, along with resilient political structures (corporatism and authoritarianism) that have worked to thwart social and economic change.

- †48. **Resistance and Protest in Black Africa.** Fall 1984. MR. NEWBURY.

An examination of the different ways in which Africans have sought to retain control over their own destiny during the colonial and post-colonial periods. Resistance to military conquest, resistance to specific colonial policies, resistance to restructuring social relations associated

with capitalist penetration studied. The ways in which protest has been expressed: overt military action, religious and intellectual expressions of resistance, passive resistance, industrial sabotage and labor actions, and banditry. A focus on how such activities have restructured African societies from within, both widening the scale of political awareness and activity and sharpening the internal differences between "resistors" and "collaborators" within a given society.

Problems Courses

Courses 51 through 59 involve the close investigation of certain aspects of the areas and periods represented. Following a reading in and a critical discussion of representative primary and secondary sources, students develop specialized aspects as research projects, culminating in oral presentations and written essays. Adequate background is assumed, the extent of it depending on whether these courses build upon introductory courses found elsewhere in the history curriculum. Enrollment in these courses requires the consent of the instructor.

†51. Problems in Early European History.

The Social History of the Reformation. Fall 1984. MR. NYHUS.

A research seminar on the social structures of Germany, France, and Switzerland in the early sixteenth century together with a study of the program of the reformers and the reasons for the popular reception of that program.

†52. Problems in Modern European History.

52, 1. Nazi Germany: Why? Fall 1984. MR. KARL.

Preference given to seniors from any department.

52, 2. Twentieth-Century Marxist Thought. Fall 1985. MR. SMITH.

Begins by reviewing secondary literature on Marxism and modern European history and the writings of Marx himself. Followed by work with the difficult texts of modern Marxism, reading Lenin, Lukacs, Benjamin, Brecht, Althusser, Jameson, and perhaps Mao Zedong. Emphasis on the relationship between social and aesthetic attitudes and practice. Substantial term paper.

53. Problems in British History.

The English Revolution. Spring 1985. MR. HOWELL.

The English revolution of the seventeenth century with particular attention to conflicting models of the causes and course, the conflict between the search for order and left-wing demands for reform, and the

place of the revolution within the context of the European revolutionary tradition.

Britain in the Twentieth Century. Spring 1986. MR. HOWELL.

A research seminar on the changing condition of Britain since 1914. Particular emphasis on changing conceptions of the role of the state, the process of loss of empire, the Irish problem, stresses within contemporary British society, and the cultural response to changing conditions.

54. Problems in American History.

54, 1. The United States and Asia since 1850. Fall 1984. MR. WHITESIDE.

Research topics concerning individuals, issues, and interpretive problems in the American relations with East and Southeast Asia. Departmental approval is required if a student wishes to count this problems course toward an East Asian Studies concentration.

54, 2. Pragmatic America. Spring 1985. MR. WHITESIDE.

The impact of pragmatic ideas as formulated by C. S. Pierce, William James, and John Dewey upon American politics, education, religion, and society. The increasingly fashionable application of pragmatic concepts to other parts of the world. Reading, discussion, research projects.

54, 3. The Community in Colonial America. Fall 1985. MS. McMAHON.

Examination of the ideals and realities of community in early America. Research topics focus on religious belief, political ideology, economic development, and social structure as determinants of community organization in New England, the Middle Colonies, and the South.

[54, 4. Poverty and Welfare in Industrial America.]

54, 5. A History of Women Writers in America. Spring 1986. MS. McMAHON.

An examination of women's voices in American history: private letters, journals, and autobiographies; short stories and novels; advice literature; essays and addresses. Research topics focus on the content and form of the writing as it illuminates women's responses to their historical situation.

55. Problems in Asian History.

55, 1. The Story of the Stone. Spring 1985. MR. SMITH.

The Story of the Stone, the greatest novel of traditional China, is for the first time available in a complete, five-volume translation.

This course employs the disciplines of both history and literature to elucidate the text. Readings include background materials in Chinese history, literary criticism, and especially theoretical works in the sociology of literature. Previous work in literary theory or Chinese history suggested but not required.

Prerequisite: Consent of the instructor.

55, 2. Problems in the History of Zen Buddhism. Spring 1986. MR. SMITH.

The growth of Zen in China from Indian Buddhism and indigenous roots; its development into the major schools. Role of Dogen Zenji in its spread to Japan. Relationship to medieval Japanese state institutions and eventual decline in the Tokugawa period. Addresses the claims and compatibility of both historical and experiential perspectives.

Prerequisite: Course work in East Asian history of religion and consent of the instructor.

†56. Problems in Latin American History.

The Frontier in History: North America and Latin America. Spring 1985. MS. JONES.

Frontier expansion in North America and Latin America and the process of transformation from "wasteland" to "land of opportunity." The history of frontier expansion of the U.S. West, Argentina, Brazil, and Mexico provide a comparative perspective. Attention to "the other side of the frontier"—the Indians—is important.

†57. Problems in African History.

[Social Issues in African Literature.]

[59. History Workshop Problems Seminar.]

60, 61. Honors Seminar. Every year. THE DEPARTMENT.

65. Contemporary Problems in Contemporary Literature. Every spring. MR. HOWELL.

A study of problems in contemporary social and intellectual history as reflected in selected works of fiction written since World War II. The course is not intended to be a course in literature or literary criticism but is rather an introduction to the use of fiction to reveal a society's social and intellectual concerns. The course is restricted to seniors and may not be counted toward the major.

Prerequisite: Consent of the instructor.

200. Independent Study. THE DEPARTMENT.

Independent Language Study

The study of languages for which regular course offerings are not available may be undertaken through a program of independent study. This program is available only to students who have a high motivation to pursue guided self-instruction in a language, who have demonstrated a high degree of competence in learning a language, and for whom the language undertaken is particularly relevant to academic or professional goals. The program allows students to begin a language and to achieve a mastery of its basics but does not offer instruction beyond the beginning level. Students who wish to go beyond this level are advised to seek more advanced instruction elsewhere during summer sessions or through exchange programs.

Responsibility for the Independent Language Study Program rests with the chairmen of the Departments of German, Romance Languages, and Russian for the language which falls into the families of Germanic, Romance, or Slavic languages, respectively. Languages outside these categories may be arranged if a faculty member in any department can be found willing to accept responsibility under the criteria here outlined. Interested students who meet the criteria should consult the appropriate faculty member as early as possible prior to the semester in which the study of the language is to begin.

Interdisciplinary Majors

A student may, with the approval of the departments concerned and the Recording Committee, design an interdisciplinary major to meet an individual, cultural, or professional objective.

Bowdoin has five interdisciplinary major programs that do not require the approval of the Recording Committee because the departments concerned have formalized their requirements. They are in art history and archaeology, art history and religion, geology and physics, mathematics and economics, and psychobiology. A student wishing to pursue one of these majors needs the approval of the departments concerned.

Art History and Archaeology

Requirements:

- 1) **Art 1, 8, 12**, and one of **Art 40** through **48**; **Archaeology 1** through **5**.
- 2) Any two art courses numbered **9** through **48**.
- 3) One of the following: **Classics 9, 200** (Independent Study in Ancient History); **History 5**; **Philosophy 11**; **Religion 31**.
- 4) Either **Art 200** or **Classics 200** (Independent Study in Archaeology).

Art History and Religion

Requirements:

- 1) **Art 1; Religion 1, 200.**
 - 2) Option A or B.
Option A: **Art 9** and **12, Religion 31**, and any one of **Religion 20** through **24**.
Option B: **Art 21** and **22, Religion 32**, and any one of **Religion 20** through **24**.
 - 3) One other art history course from the option group not chosen above or **Art 10**.
 - 4) Two electives in religion, one of which must be **Religion 14, 16, 17, or 18**.
 - 5) One art course numbered 42-47.
- Philosophy 9** is strongly recommended for the junior or senior year.

Geology and Physics

Requirements:

- 1) **Chemistry 15, 16; Geology 11, 12, 22, 23; Mathematics 11, 12; Physics 17, 23, 27.**
- 2) Either **Physics 20** or **30**.
- 3) Two additional courses in geology and/or physics.

Mathematics and Economics

Requirements:

- 1) Seven or eight courses in mathematics as follows: **Mathematics 13**; either **Mathematics 21** and **Computer Science 5**, or **Mathematics 26** or **29; 27; 28; 30; 37**; either **22** or **32** or **41**.
- 2) Seven courses in economics as follows: **Economics 1, 2, 5, 6, 16**, and two electives numbered **7** or above. One elective may be an independent study in an appropriate topic.

Psychobiology

Requirements:

See the Departments of Biology or Psychology for specific requirements.

Mathematics

PROFESSOR GROBE, *Chairman*; PROFESSORS CHITTIM, JOHNSON, AND WARD;
ASSOCIATE PROFESSORS BARKER AND FISK; ASSISTANT PROFESSOR
ROBERTS; INSTRUCTOR ONG; LECTURER CURTIS

Requirements for the Major in Mathematics: A major consists of at least eight courses numbered 21 or above, including at least one of the following: **Mathematics 32, 35, 39**, or a course numbered in the 40s.

A student must submit a major program to the department at the time that he or she declares a major. That program should include courses in which the emphasis is primarily theoretical and courses in which applications are stressed. A student's major program may be changed later with the approval of the departmental advisor.

All majors should take basic courses in algebra (e.g., **Mathematics 21** or **35**) and in analysis (e.g., **Mathematics 22** or **32**). The department also encourages all majors to complete at least one sequence in a specific area of mathematics. Those areas are: algebra (**Mathematics 21, 35, and 42**); analysis (**Mathematics 32, 34, and 45**); applied mathematics (**Mathematics 28, 29, and 41**); probability and statistics (**Mathematics 27, 37, and 47**); topology (**Mathematics 32, 39, and 40**). In exceptional circumstances, a student may substitute a quantitative course from another department for one of the eight mathematics courses required for the major. Such a substitution must be approved in advance by the department.

Majors who have demonstrated that they are capable of intensive advanced work are encouraged to undertake independent study projects. With the prior approval of the department, such a project counts toward the major requirement and may, in exceptional cases, lead to graduation with honors in mathematics.

Requirements for the Minor in Mathematics: A minor in mathematics consists of a minimum of four courses numbered 21 or above, at least one of which must be **Mathematics 29** or any course numbered 31 or above.

Interdisciplinary Major: The department participates in an interdisciplinary program in mathematics and economics. See page 148.

Listed below are some of the courses recommended to students contemplating various careers in mathematics.

For secondary-school teaching: **Computer Science 5, Mathematics 21, 25, 27, 31, 32, 33, 35, 36.**

For graduate study: **Mathematics 21, 22, 32, 34, 35, 39,** and at least one course numbered in the 40s.

For engineering, operations research, and applied mathematics: **Mathematics 22, 24, 26, 27, 28, 29, 30, 31, 34, 37, 41, 47.**

For mathematical economics and econometrics: **Mathematics 21, 22 or 32, 24, 26, 27, 30, 31, 37, 47,** and **Economics 16.**

For computer science: **Computer Science 5, Mathematics 21, 24, 26, 27, 30, 31, 35, 36, 37.**

2. Topics in Mathematics. Every spring.

This course is designed for students who wish to learn something about the spirit of modern mathematics and who do not plan to take other mathematics courses. The emphasis is on the history and origins of mathematical problems; the development of the ideas, language, and

symbolism needed to deal with those problems; and the ramifications and applications of the theory to current quantitative problems in a variety of disciplines. Topics are chosen from geometry, number theory, probability, game theory and optimization, graph theory, topology, and computing.

10. Introduction to College Mathematics. Every fall. MRS. ROBERTS.

Material selected from the following topics: combinatorics, probability, modern algebra, logic, linear programming, and computer programming. This course, followed by **Mathematics 11**, is intended as a one-year introduction to mathematics and is recommended for those students who intend to take only one year of college mathematics.

11. Differential and Integral Calculus I. Every semester. THE DEPARTMENT.

An introduction to limits; the derivatives of rational functions and roots of rational functions; the chain rule; the derivatives of the trigonometric functions; applications of the derivative to curve sketching; the Mean Value theorem; integration of algebraic functions; areas between curves.

Mathematics 11 may be taken as either a lecture or a self-paced course in the fall semester, but only as a self-paced course in the spring semester.

Open to students whose secondary school background has included at least three years of mathematics.

12. Differential and Integral Calculus II. Every semester. THE DEPARTMENT.

Techniques of integration; the logarithmic and exponential functions; the inverse trigonometric functions; applications of the integral; improper integrals; series, including Taylor's theorem and differentiation and integration of power series.

Mathematics 12 may be taken as either a lecture or a self-paced course. Prerequisite: **Mathematics 11** or equivalent.

13. Multivariate Calculus with Linear Algebra. Every semester. THE DEPARTMENT.

Multivariate calculus in two and three dimensions, and an introduction to linear algebra. The calculus topics include: vector geometry and the calculus of curves; differentiation; the partial derivatives of real-valued functions, the gradient, directional derivatives, approximations using the tangent plane, and applications to extremal problems; multiple integration in two and three dimensions. The linear algebra topics include: an introduction to vector spaces, with an emphasis on \mathbb{R}^n , and the concept of dimension. Matrix algebra and Gaussian elimination are

covered as time permits. Applications from the physical and the social sciences are discussed as time permits.

Mathematics 13 may be taken as either a lecture or a self-paced course.

Prerequisite: **Mathematics 12** or equivalent.

14. Elementary Probability and Statistics. Every spring.

Course material is divided between probability and statistics. Probability topics may include basic axioms, combinatorics, conditional probability, independence, discrete and continuous random variables, mean, variance, and expected value. Topics in statistics may include descriptive statistics, random samples, sample mean, sample variance, point estimates, confidence intervals, and hypothesis testing.

Prerequisite: **Mathematics 10** or **11**, or their equivalent, or consent of the instructor.

21. Vector Geometry and Linear Algebra. Every spring.

Topics include vectors, matrices, determinants, vector spaces, inner product spaces, linear transformations, eigenvalues and eigenvectors, and quadratic forms. Applications to linear equations, conics, quadric surfaces, and n-dimensional geometry.

Prerequisite: **Mathematics 13** or consent of the instructor.

22. Calculus of Vector Functions. Every fall. Fall 1984. MR. CHITTIM.

The basic concepts of multivariate and vector calculus. Topics include continuity; the derivative as best affine approximation; the chain rule; Taylor's theorem and applications to optimization; Lagrange multipliers; multiple integration and change of variables; line and surface integration; gradient, divergence, and curl; conservative and solenoidal vector fields; theorems of Green, Gauss, and Stokes. Applications from economics and the physical sciences are discussed as time permits.

Prerequisite: **Mathematics 13**.

24. Nonnumeric Algorithms. Every other spring. Spring 1985. MR. FISK.

The mathematical theory of nonnumeric algorithms. Sorting and searching, expected time and storage of algorithms, graph theory algorithms, and combinatorial algorithms. Students are required to program and run short computer programs.

Prerequisite: **Mathematics 13**, **Computer Science 5**, or consent of the instructor.

25. Number Theory. Every other spring. Spring 1985.

A standard course in elementary number theory which traces the historical development and includes the major contributions of Euclid, Fermat, Euler, Gauss, and Dirichlet. Prime numbers, factorization, and

number-theoretic functions. Perfect numbers and Mersenne primes. Fermat's theorem and its consequences. Congruences and the law of quadratic reciprocity. The problem of unique factorization in various number systems. Integer solutions to algebraic equations. Primes in arithmetic progressions. An effort is made to collect along the way a list of unsolved problems.

26. Numerical Analysis. Every spring.

An introduction to the computational techniques required in the numerical solution of mathematical problems. Topics include: the solution of linear and nonlinear simultaneous equations, polynomial approximation, matrix inversion, numerical integration, and solutions of systems of first-order differential equations.

The students are required to develop and run programs on Bowdoin's DECSYSTEM 1091 computer. In order to present the fundamentals of FORTRAN programming, an extra hour per week of instruction may be scheduled. No previous exposure to computer programming is assumed.

Prerequisite: **Mathematics 13, 21**, or consent of the instructor

27. Probability. Every fall. Fall 1984. MR. WARD.

A study of the mathematical models used to formalize non-deterministic or "chance" phenomena. General topics include combinatorial models, probability spaces, conditional probability, discrete and continuous random variables, independence and expected values. Specific probability densities such as the binomial, Poisson, exponential, and normal will be discussed in depth.

Prerequisite: **Mathematics 13**.

28. Methods of Applied Mathematics I. Every year in alternate semesters. Spring 1985. Fall 1985.

Mathematical techniques used in the formulation and analysis of problems arising in the physical, biological, and social sciences. Emphasis is placed upon the rigorous development of the methods discussed as well as their application. Topics include difference equations, first-order differential equations, second- and higher-order linear equations, series solutions, and Laplace transform methods.

Prerequisite: **Mathematics 13** or concurrent registration in **13**.

29. Methods of Applied Mathematics II. Every other spring. Spring 1986.

A continuation of **Mathematics 28**. Topics include application of linear algebra to the solution of systems of first-order linear differential equations, numerical methods with computing (including instruction

in FORTRAN programming and the DECSys^{tem} 1091), nonlinear differential equations and stability theory, and introduction to partial differential equations and Fourier series. Boundary value problems are discussed as time permits.

Prerequisite: **Mathematics 28.**

30. **Linear Programming and Optimization.** Every other fall. Fall 1984. MRS. ROBERTS.

A survey of some of the mathematical techniques for optimizing various quantities, many of which arise naturally in economics and, more generally, in competitive situations. Production problems, resource allocation problems, transportation problems, and the theory of network flows. Game theory and strategies for matrix games. The emphasis is on convex and linear programming methods, but other nonlinear optimization techniques are presented. The course includes computer demonstrations of many of the techniques that are discussed.

Prerequisite: **Mathematics 13.**

31. **Combinatorics and Graph Theory.** Fall 1984. MR. FISK.

An introduction to combinatorics and graph theory. Topics to be covered may include enumeration, matching theory, generating functions, and partially ordered sets. Applications cover Latin squares, designs, computer science, and graph algorithms.

Prerequisite: **Mathematics 12.**

32. **Introduction to Analysis.** Every fall. MR. BARKER.

An introduction to the theory of functions of one real variable. A major goal is the rigorous development of the foundations of calculus. Topics include the completeness and topological properties of the real numbers, metric spaces, sequences, continuity, uniform continuity, differentiability, and Riemann integration. Additional topics may be chosen from the following: series convergence, uniform convergence, Taylor series, and properties of transcendental functions. The course also serves as an introduction to rigorous mathematical proof.

Prerequisite: **Mathematics 12.**

33. **Geometry.** Spring 1985. MR. CHITTIM.

Primarily a course in advanced analytic geometry of two and three dimensions. Analysis of plane curves. Cross-ratio; poles, polars, and diameters of conics. Formal reduction of the second-degree equations of curves and surfaces using matrix algebra. Homothetic and Moebius transformations; the Euler Line and related triangle properties. Theorems of Menelaus, Ceva, Desargues, and Pascal.

Prerequisite: **Mathematics 13 or 21.**

34. **Functions of a Complex Variable.** Every other spring. Spring 1986.

The differential and integral calculus of functions of a complex variable. Cauchy's theorem and Cauchy's integral formula, power series, singularities, Taylor's theorem, Laurent's theorem, and the residue calculus, harmonic functions, and conformal mapping.

Prerequisite: **Mathematics 13, 22**, or consent of the instructor.

35. **Introduction to Algebraic Structures.** Every fall. Fall 1984. MR. JOHNSON.

A study of the basic arithmetic and algebraic structure of the common number systems, polynomials, and matrices. Axioms for groups, rings, and fields, and an investigation into general abstract systems which satisfy certain arithmetic axioms. Properties of mappings which preserve algebraic structure.

Prerequisite: **Mathematics 21**.

36. **Topics in Set Theory and the Foundations of Mathematics.** Every other spring. Spring 1986.

One or more topics selected from the general area of set theory, logic, and the foundations of mathematics. Recent courses have dealt with logic and computability theory, countability and diagonalization, Turing machines and various kinds of computability, recursive functions, Hilbert's Tenth Problem, undecidability and incompleteness.

Prerequisite: At least two years of college mathematics or consent of instructor.

37. **Statistics.** Every spring. MRS. ROBERTS.

An introduction to the fundamentals of mathematical statistics. The theory of random variables, including density functions, distribution functions, and moment generating functions. The standard distributions: binomial, Poisson, normal, gamma, χ^2 , t, and F. Point estimates, confidence intervals, and hypothesis testing. Additional topics, as time allows, are chosen from regression analysis, nonparametric techniques, and analysis of variance.

Prerequisite: **Mathematics 13 and 27**.

38. **History of Modern Mathematics.** Every other spring. Spring 1986.

A survey of some of the major historical developments in mathematics. Designed to give junior and senior majors a greater appreciation and understanding of mathematics. This course will examine famous problems, their solutions, the theories developed to attack these problems, and relevant works of great mathematicians. Topics to be discussed include examples from geometry, topology, number theory, differential equations, mathematical physics, and the interconnections among these areas. Limited to fifteen students.

Prerequisite: At least two courses beyond **Mathematics 13** and consent of the instructor.

39. Topology. Every other fall. Fall 1985.

An introduction to both point-set and geometric topology centered on the fundamental notion of topological space and continuous function. Topics include fundamentals of point-set topology with special emphasis on homeomorphisms, compactness, connectedness, and separation. Geometric applications include fixed point theorems, surfaces, covering spaces, the Jordan curve theorem, and an introduction to knots and links.

Prerequisite: At least two years of college mathematics and consent of the instructor.

40. Topics in Topology. Spring 1986.

One or two directions in topology are pursued with a fair degree of thoroughness.

Prerequisite: **Mathematics 39** or consent of the instructor.

41. Advanced Topics in Applied Analysis. Fall 1984. MR. ONG.

One or more selected topics in applied analysis. Material will be selected from the following: partial differential equations, functional differential equations, the calculus of variations, and control theory.

Prerequisite: **Mathematics 29**.

42. Advanced Topics in Algebra. Spring 1986.

One or more specialized topics from abstract algebra and its applications.

Prerequisite: **Mathematics 35**, or **Mathematics 21** and consent of the instructor.

44. Advanced Topics in Geometry. Fall 1986.

One or more selected topics from differential geometry, algebraic geometry, or projective and metric geometry. The topic is usually differential geometry with an emphasis on those geometric properties of curves and surfaces which can be investigated using the techniques of calculus.

Prerequisite: **Mathematics 22**.

45. Advanced Topics in Analysis. Spring 1985.

One or more selected topics from analysis. Topics may be chosen from Lebesgue integration, general measure and integration theory, Fourier analysis, Hilbert and Banach space theory, and spectral theory.

Prerequisite: **Mathematics 32**.

47. Topics in Probability and Statistics. Fall 1985.

One or more specialized topics from probability and statistics. Topics in statistics may include multivariate analysis, nonparametric statistics, sampling theory, and experimental design. Topics in applied probability

theory may include queuing and inventory theory, reliability mathematics, and Monte Carlo techniques.

Prerequisite: Mathematics 37 or consent of the instructor.

200. Independent Study. THE DEPARTMENT.

Music

PROFESSOR SCHWARTZ, *Chairman*; PROFESSOR BECKWITH; ASSISTANT
PROFESSOR MUKHERJEE; INSTRUCTOR GREENLEE

Requirements for the Major in Music: Music 1 and Music 10 are prerequisite for entrance to the major. Prospective majors can waive either or both of these courses by examination; otherwise they are urged to take either or both of the courses during their freshman year.

The required courses are Music 11, 12, 13, and 14; three courses chosen from Music 4, 21, 22, 23, 24; and three semester courses chosen with the approval of the department. No more than one course (i.e. two semesters) of performance studies will be included in the latter category toward fulfillment of the major. Students planning to take graduate degrees in music should take courses in theory, history, and literature beyond the minimum major requirements, if possible, and must demonstrate facility at the keyboard.

Requirements for the Minor in Music: Music 1, Music 11 (with Music 10 as prerequisite, or passed by waiver), and three additional semester courses in music.

All students majoring or minoring in music are expected to participate in at least one regularly rehearsing departmental ensemble for at least one year.

1. Introduction to Music. Fall 1984. MR. SCHWARTZ.

For students with little or no previous training in music. Ability to read music or play an instrument is not necessary. The essentials of music—sound and time—are studied as they have been used in different periods and in the context of musical forms. Listening materials are drawn from a variety of sources: early Western music, Western music from the baroque through romantic eras, and twentieth-century music.

2. Music in Society.

Previous musical training not required.

Spring 1985. **Music and Technology: The New World Music Village.**
MR. MUKHERJEE.

An inquiry into the function of music (organized sound) in our modern world, with a focus on American society and culture. As many types of music as possible considered, examining their origins and directions of their current trends. Topics covered include the phenomenon

of cross-cultural influences of world music, the use of music in the public media, the place of the performing arts in society, and a comparison of Western and other musics. A collective attempt to formulate some contemporary and relevant aesthetic principles based upon these current trends.

Spring 1987. **World Musics.**

3. **Electronic Music: Techniques and Composition.** Fall 1984. MR. MUKHERJEE.

A practical, hands-on introduction to the use of tape recording and devices for electronic sound generation and processing. The primary objective and activity: the production of compositions for tape and live electronics. Basic principles of acoustics, psychoacoustics, and the physics of sound are covered. A short historical of this medium included. A concert of student works at the end of the course is anticipated. Enrollment by permission of the instructor; enrollment limited to ten students.

4. **Contemporary Music.** Spring 1986. MR. SCHWARTZ.

A survey of music beginning with the late nineteenth century (Wagner, Mahler) and continuing to the present avant-garde. Impressionism, the 12-tone school, the neoclassic movement, and recent developments in electronic, serial, "chance," and collage techniques will be discussed. Special attention devoted to Stravinsky, Schoenberg, Ives, and Cage. Ability to read music is not necessary.

7. **The Symphonies of Franz Josef Haydn.** Fall 1984. MR. BECKWITH.

Haydn's symphonies and the development of his symphonic style investigated in the context of the classical period (from the death of Bach to the death of Beethoven). Works chosen from the whole of Haydn's symphonic output. Reference made to the symphonies of Mozart and Beethoven as well.

8. **Some Choral Works of J. S. Bach.** Spring 1985. MR. BECKWITH.

With 1985 the 300th anniversary of the birth of Bach, it is especially appropriate to examine a number of his major choral works. Among those to be studied: the Mass in B minor, the St. John Passion, two motets ("Jesu meine Freude" S.227 and "Komm Jesu komm" S.229) and four cantatas—"Christ lag in Todesbuden S.4," "Nun ist das Heil S.50," "Sie werden aus Saba alle kommen S.65," and "Aus der Tiefe S.131."

10. **Introduction to the Structure of Music.** Every spring. MR. GREENLEE.

For students with little or no previous training in music. A study of the organizational principles inherent in various pitch systems (scales, modes) and rhythmic systems, with emphasis on the notation of these in

written symbols. Such concepts as tonality, transposition, modulation, basic harmonic motion, and simpler forms will be introduced. Aural dictation, keyboard application, and development of fluency in notation are stressed.

The sequence **Music 1, 10** is recommended for the student desiring a broad, comprehensive introduction to the field of music.

11, 12. Elementary Materials of Music. MR. BECKWITH.

Elementary harmony and analysis, primarily of eighteenth- and nineteenth-century music. Ear training, dictation, and fluency of notation are stressed. There are three class hours plus two laboratory hours weekly.

Prerequisite: **Music 10** or equivalent.

13, 14. Advanced Materials of Music. MR. SCHWARTZ.

A continuation of **Music 11, 12** with increasing stress upon the development of skills in analysis. **Music 13** concentrates upon chromatic harmony, and the practice of counterpoint in Renaissance and baroque styles. **Music 14** concentrates upon twentieth-century styles and analysis of large forms.

Prerequisite: **Music 11, 12.**

Music History, Literature, and Analysis

Courses **21** through **24** are studies of music literature from the viewpoint of historical development and the analysis of style and form. Intended primarily for majors in music, they need not be taken in chronological order.

Prerequisite: **Music 1** or the equivalent; **Music 12** or concurrent registration in **Music 12.**

21. Medieval and Renaissance Music (up to 1600). Fall 1984. MR. GREENLEE.

22. Baroque and Preclassic (1600-1750). Spring 1985. MR. BECKWITH.

23. Classic and Early Romantic (1750-1850). Fall 1985. MR. BECKWITH.

24. Romanticism and Early Twentieth Century (1850-1925). Spring 1986. MR. BECKWITH.

28. Performance Practice. Spring 1986. MR. GREENLEE.

The study of medieval, Renaissance, and baroque music through performance on replicas of the instruments of the time. The course work includes research into various historical and stylistic problems as well as the study of instrumental development and performance techniques. There is a public performance and demonstration at the end of the semester.

Prerequisite: **Music 21** or equivalent, and consent of the instructor.

31. Orchestration. Fall 1985. MR. MUKHERJEE.

Transcription, arrangement, and free composition for ensembles of stringed, woodwind, and brass instruments, voice(s) and piano, the primary aim being that of effective instrumentation. Intensive study of orchestral and chamber scores, drawn from the music literature.

Prerequisite: Music 11, 12 or equivalent.

32. Composition. Spring 1985. MR. SCHWARTZ.

Free composition for the ensemble combinations cited previously in Music 31, with the emphasis upon creative work in the more traditional forms (rondo, variation, sonata-allegro) and a variety of experimental techniques.

Prerequisite: Music 11, 12 or consent of the instructor.

42. Advanced Topics in Music Literature.

The Beethoven Symphonies. Spring 1985. MR. BECKWITH.

The nine symphonies are studied in light of the evolution of Beethoven's symphonic style. Emphasis on the formal structure of the works: their stylistic elements are considered as they contribute to an understanding of structure. In order to set the proper historical context, symphonic styles of Mozart, Haydn, and Schubert are also discussed.

Performance Studies

Not more than six credits of individual performance and ensemble courses together may be taken for graduation credit. For administrative purposes, applied music and ensemble study will bear one of the course numbers 51 through 58, 61 through 98, depending on the number of semesters of such work the individual student has taken.

Instructors in 1983-1984 included Julia Adams (viola), Naydene Bowder (piano), Deidra Carr (harp), Ben Clinesmith ('cello), Kathleen Clinesmith (clarinet), William Eves (piano), Laura Jessen (flute), Christopher Kane (guitar), Stephen Kecskemethy (violin), Dale Perkins (trumpet), Elizabeth Sollenberger (organ).

51-58. Individual Performance Studies. Every year.

The following provisions govern applied music:

1. Necessary for admission are two courses from the following: Music 1, 2, 3, 4, 7, 8, 10, 11, and 12. These may be taken concurrently with the first two semesters of performance studies (Music 51, 52).

2. Individual performance courses are intended for the continued study of an instrument with which the student is already familiar. Students may enroll only with the consent of the department. Students should plan to take at least two semesters because study on an instrument

for less than two semesters is normally not sufficient for a meaningful educational or musical experience.

Admission is by audition only. Only students who are intermediate or beyond in the development of their skills are admitted.

At the end of the first year each student is critically reviewed by members of the department. Permission to continue is granted on the basis of seriousness of intent, attendance, rate of progress, etc.

At the end of the fourth semester each student is again reviewed critically. Only exceptional students are granted permission to continue beyond this point. Musicianship, talent, and general stage of development are the important factors. The same applies to the end of the sixth semester. At the end of the sixth and eighth semesters a student is expected to present a formal public recital of at least forty-five minutes' duration.

During the first four semesters a student is expected to perform in public with reasonable frequency. The student may be called upon to play for the music faculty from time to time.

3. One credit is granted only after two consecutive semesters of study.

4. The student pays a fee of \$145.00 for each semester of study. In some cases the student may have to travel off campus to receive instruction. Instruction is offered as available on orchestral and chamber instruments for which a significant body of written literature exists. Normally, instruction is available in flute, oboe, clarinet, bassoon, saxophone, trumpet, trombone, violin, viola, 'cello, harpsichord, organ, piano, guitar, and voice.

61-98. Ensemble Performance Studies. Every year.

The following provisions govern ensemble:

1. Ensemble music courses are intended to provide a student with experience in group music making. Students are admitted to an ensemble class only with the consent of the department and, for those enrolled in chamber ensembles, upon the formation of a specific chamber group.

2. One credit is granted only after two consecutive semesters of study.

3. Ensembles will include at least the following: 61-68, chorale; 71-78, orchestra; 81-88, chamber choir; 91-98, wind ensemble.

4. Grade will be credit or fail.

5. Ensembles meet regularly for a minimum of two hours weekly. Chamber ensembles are offered only as instruction is available.

6. Each ensemble will perform in public.

200. Independent Study. THE DEPARTMENT.

1984 Summer School of Music

ROBERT K. BECKWITH, *Director*; LEWIS KAPLAN, *Music Director* (violin, conductor); CHRISTINE SZALEY, *Administrator*; MILTON BABBITT (composer); PETER BASQUIN (piano); NINA BEILINA (violin); BONITA BOYD (flute); FIORELLA CANIN (piano); MARTIN CANIN (piano); GLEN CORTESE (composer); CHRISTOPHER DEANE (percussion); PAUL DOKTOR (viola); OTTO EIFERT (bassoon); DAVID GILBERT (composer); FRANCINE JACOBS (flute); BEVERLY PECK JOHNSON (voice); JENNIFER LANGHAM ('cello); CHARLES NEIDICH (clarinet); GERARD REUTER (oboe); ELAINE RICHEY (violin); CHANNING ROBBINS ('cello); SAMUEL SANDERS (piano); ELEANORE SCHOENFELD ('cello); RALPH SHAPEY (composer)

The curriculum is designed to develop the musicianship, technique, and sense of style of young preprofessional instrumentalists. The program consists of an individually designed schedule of private instruction, chamber ensemble coaching and rehearsals, master classes, and performances at the student recitals.

Instrumental students devote proportionally more time to their individual studies, while chamber music students devote proportionally more of their time to ensemble work and do not receive as much private instruction.

Upon request a certificate of attendance, testifying to the work accomplished, is given.

Philosophy

PROFESSOR MCGEE, *Chairman*; PROFESSOR POLS; ASSOCIATE PROFESSOR CORISH; ASSISTANT PROFESSOR COLEMAN

Requirements for the Major in Philosophy: The major consists of eight courses, which must include **Philosophy 11, 12, and 20**, at least two other courses from the group numbered in the twenties and two from the group numbered in the thirties. The remaining course may be from any level.

Requirements for the Minor in Philosophy: The minor consists of four courses, which must include **Philosophy 11 and 12** and one course from the group numbered in the twenties. The fourth course may be from any level.

Philosophy 1

Freshman-Sophomore Seminars

Enrollment is limited to twenty for each seminar; freshmen are given first preference for the available places; sophomores are given second preference; if there are any remaining places upperclassmen may be admitted with consent of the instructor.

Topics change from time to time but are restricted in scope and make no pretense at being an introduction to the whole field of philosophy. They are in all cases topics in which contemporary debate is lively and as yet unsettled and to which contributions are being made by more than one field of learning.

[Seminar 1. Mind and Body.]

Seminar 2. Free Will. Fall 1984 and 1985. Ms. COLEMAN.

An examination of the question whether or not we have what has traditionally been called free will. Are our actions free, or at least partly free; or are they wholly caused, or determined, in some sense that makes the notion of freedom inappropriate in descriptions of actions? Today the question is often dealt with in terms of the related concept of moral responsibility. Are we really responsible agents as our tradition tells us we are? This question then leads to a number of others. What do we mean when we say that people are responsible for their actions? Are the concepts of moral and legal responsibility of permanent human importance, or should they be replaced by concepts that are more suited to certain contemporary deterministic views of human nature? What role does reasoning play in human action? Can reasoning be understood in deterministic terms? Readings in contemporary and older materials are used as the basis for the seminar discussions.

[Seminar 3. What Is Humanism?]

[Seminar 4. Philosophy of Education: Discipline and Innovation.]

Seminar 5. Types of Philosophic Prose. Fall 1984 and 1985. MR. MCGEE.

Some traditional and contemporary problems of philosophy are presented in classic forms of philosophic prose. Thus, dialogue is represented by Plato and Berkeley; demonstration by Descartes and Spinoza; the essay by Hume, Schopenhauer, and Mill; lyric prose by Nietzsche; and professional prose by Bertrand Russell and A. J. Ayer. Student-written work will be required in all these types.

Seminar 6. Self and Self-Knowledge. Spring 1985 and 1986. MR. CORISH.

What is the self? What knowledge do we have of the self? Is that knowledge similar to or different from our knowledge of the world about us—that is, is knowledge of the subject similar to or different from knowledge of an object? These and other questions (e.g. personal identity, the unconscious, emotion) discussed. Readings range from ancient (Plato, Aristotle, Augustine) to modern (Hume, Kant, perhaps Freud, Jung, the Behaviorists).

4. Philosophy and Poetry. Spring 1985. MR. CORISH.

A study of some recognized philosophical doctrines as they appear in

poetry, e.g., the philosophical doctrines of Aquinas in the poetry of Dante, those of Duns Scotus in the poetry of Hopkins, the doctrine of metempsychosis in Wordsworth's *Intimations of Immortality*, Kantian doctrines in Coleridge, etc. Doctrines and poets considered may vary from year to year. We shall also discuss poetic techniques and expressions in philosophy, as, for example, in Parmenides and in Plato, and shall devote some considerable time to a philosophical discussion of the nature of poetry.

6. Literature as Philosophy. Spring 1986. MR. MCGEE.

After a presentation of the explicitly philosophical background of the literary works to be studied, the philosophic life-attitudes expressed in them are examined to determine their adequacy as philosophy and their relevance to conduct. The literature varies from time to time but always includes one major contemporary work and one major older work.

[7. Logic and the Limits of Language.]

9. Philosophy of Art. Spring 1986. MS. COLEMAN.

A comparative study of the nature of meaning in poetry, music, and the visual arts. Focuses on selected major works in these three fields and, in this concrete setting, the relations between meaning and the expressive and productive (or creative) aspects of art are explored.

†11. Major Philosophers of the West: Beginnings to Christianity. Fall 1984. MR. CORISH. Fall 1985. MR. MCGEE.

The sources and prototypes of Western thought. Concentration on Plato and Aristotle, but some attention is given to the pre-Socratic philosophers who influenced them and to the Stoics and Epicureans. Medieval philosophy is more briefly considered, to show the interaction of Christianity and Greek thought.

12. Major Philosophers of the West: Renaissance to Idealism: Spring 1985. MR. MCGEE. Spring 1986. MS. COLEMAN.

Some attention is given to the philosophic grounds of the scientific revolution and to the intellectual and moral response the new scientific view of the world evoked from the philosophers. Reading in five or six of the following: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant.

Prerequisite: **Philosophy 11.**

20. Major Philosophers of the West: The Nineteenth Century. Fall 1984 and 1985. MS. COLEMAN.

A study of tendencies in the nineteenth century that have had an important influence on contemporary thought: the situation of philosophy after Kant; the development of idealism through Fichte, Schelling, and

Hegel; the decline and fall of reason from Hegel to Schopenhauer and Kierkegaard; dialectical materialism, utilitarianism, and the origins of positivism.

Prerequisite: **Philosophy 11** and **12**.

21. Ethics. Spring 1985. Ms. COLEMAN.

Various types of answers to the questions, What is right for me to do? What ought to be done? and What is the good for man? are traced to their philosophic bases in historical and contemporary sources. The justification these bases provide is critically discussed, and some possible meanings of statements used to answer questions in morals are made explicit and compared.

Prerequisite: **Philosophy 11** and **12**, or consent of the instructor.

23. Logic and Formal Systems. Spring 1986. MR. CORISH.

An introduction to the techniques and applications of twentieth-century deductive logic. After a consideration of the traditional approach, including the syllogism, the following topics are taken up: propositions, truth-functions, quantification theory, predicates, relations, natural deduction, and the properties of formal systems (consistency, completeness, etc.). No background in mathematics is presupposed.

[24. Space and Time.]

25. The Nature of Scientific Thought. Fall 1985. MR. CORISH.

A historical and methodological study of scientific thought as exemplified in the natural sciences. Against a historical background ranging from the beginnings of early modern science to the twentieth century, such topics as scientific inquiry, hypothesis, confirmation, scientific laws, theory, and theoretical reduction will be studied. The readings include such authors as Burt, Butterfield, Duhem, Hempel, Koyré, Kuhn, Nagel, Poincaré, Popper, Toulmin, as well as classical authors such as Galileo, Descartes, Newton, Berkeley, and Leibniz.

Prerequisite: **Philosophy 11** and **12**, or consent of the instructor.

26. On Love. Fall 1984. MR. MCGEE.

An examination of philosophic attempts to analyze and clarify the cluster of concepts signaled by terms such as "love," "friendship," "charity," "*agapē*," and "fellow-feeling." Readings drawn from some of the following authors: Plato, Aristotle, St. Paul, St. Thomas, Spinoza, Schopenhauer, Nietzsche, Freud, Ortega y Gasset, and C. S. Lewis.

Prerequisite: **Philosophy 11** and **12**, or consent of the instructor.

[28. Contemporary Philosophy of Human Nature.]

29. Philosophy of Criticism. Spring 1985. MR. MCGEE.

To discover, to analyze, and to evaluate definitions and criteria in-

licit in criticisms of the various arts. Readings, which may differ from year to year, range from ancient (Plato, Aristotle) to modern (Eliot, Wimsatt).

Prerequisite: **Philosophy 11 and 12.**

Advanced Seminars

Although courses numbered in the thirties are advanced seminars primarily intended for majors in philosophy, adequately prepared students from other fields are also welcome. Besides the stated prerequisite, **Philosophy 11 and 12**, at least one of the courses from the group numbered in the twenties will also be found a helpful preparation.

31. **Plato and Platonism.** Fall 1984. MR. CORISH.

A study of some of the principal dialogues of Plato, drawn chiefly from his middle and later periods, followed by a study of selected material from the later history of Platonism. The instructor will select the dialogues that will be read, but topics to be studied in later Platonism and Neoplatonism will depend on the particular interests of the students.

Prerequisite: **Philosophy 11 and 12.**

[32. **The Analytic Movement.**]

[33. **Wittgenstein.**]

[34. **Topics in Medieval Philosophy.**]

35. **The Philosophy of Aristotle.** Spring 1985. MR. CORISH.

A textual study of the basics of Aristotle's philosophy. Aristotle's relationship to Plato, his criticism of the Platonic doctrine of Forms, and Aristotle's own doctrines of substance, causation, actuality, potentiality, form, and matter are discussed. Some of the Aristotelian disciplines of logic, physics, metaphysics, psychology, and political and moral philosophy are examined in terms of detailed specific doctrines, such as that of kinds of being, the highest being, the soul, virtue, the state. Ends with a discussion of Aristotle's views of systematic research and his influence on subsequent thought.

Prerequisite: **Philosophy 11 and 12.**

[36. **Spinoza's Ethics.**]

[37. **Kant.**]

38. **Hume and Kant.** Spring 1985. MS. COLEMAN.

A critical and comparative study of Hume's *Treatise of Human Na-*

ture, Book I, and Kant's *Critique of Pure Reason*. The study of these texts focuses on such issues as the problem of scepticism, philosophical methodology, the epistemological role of the imagination, and the dialectic of human reason.

Prerequisite: Philosophy 11 and 12.

39. **Schopenhauer.** Spring 1986. MR. MCGEE.

A detailed study of the text of Schopenhauer's major work, *The World as Will and Idea*.

Prerequisite: Philosophy 11 and 12.

200. **Independent Study.** THE DEPARTMENT.

Physics and Astronomy

PROFESSOR LACASCE, *Chairman*; PROFESSOR HUGHES; ASSOCIATE PROFESSOR TURNER; ASSISTANT PROFESSOR CORSON; TEACHING ASSOCIATE ROBERTS

Requirements for the Major in Physics: The major program in physics depends to some extent on the student's goals. These goals should be discussed with the department. Those who intend to do graduate work in physics should plan to do an honors project. For those considering a program in engineering, consult page 114. A major student with an interest in an interdisciplinary area such as geophysics, biophysics, or oceanography will choose appropriate courses in related departments. Secondary school teaching requires a broad base in science courses as well as the necessary courses for teacher certification. For a career in industrial management, some courses in economics and government should be included.

In any case a major in physics is expected to complete **Mathematics 11, 12, Physics 17, 23, 27, 28**, and four more approved courses, one of which may be **Mathematics 13** or above, or **Chemistry 35**. In addition a major is expected to have a working knowledge of a computer language. This requirement can be satisfied by **Computer Science 5** or **Mathematics 26** or by demonstrated competence. For honors work a student is expected to complete **Mathematics 13** or **22** and **Physics 17, 23, 27, 28, 30, 31, 200**, and four more courses, one of which may be in mathematics above **13** or **Chemistry 35**. Students interested in interdisciplinary work may, with permission, substitute from other departments.

Requirements for the Minor in Physics: At least four courses numbered **17** or higher, at least one of which is from the set of **Physics 23, 27, and 28**.

Interdisciplinary Major: The department participates in an interdisciplinary program in geology and physics. See page 148.

Core Courses

- 17. Mechanics and Matter.** Every semester. Fall 1984. MR. TURNER. 1985. MR. LACASCE.

The basic concepts and laws of classical mechanics with special emphasis on the conservation laws of momentum, energy, and angular momentum. Particle dynamics, including the motions of particles in gravitational, electric, and magnetic fields. A brief introduction to kinetic theory and special relativity. Three hours of laboratory work a week.

Prerequisite: Previous credit or concurrent registration in **Mathematics 11**. Enrollment is limited to students without credit for or concurrent registration in **Chemistry 35**. Open only to freshmen and sophomores in the fall.

- 23. Electric Fields and Circuits.** Every spring. MR. TURNER.

The basic phenomena of the electromagnetic interaction are introduced. The basic relations are then specialized for a more detailed study of linear network theory. Laboratory work stresses the fundamentals of electronic instrumentation and measurement. Three hours of laboratory work a week.

Prerequisite: **Physics 17** and previous credit or concurrent registration in **Mathematics 12**, or consent of the instructor.

- 27. Waves and Quanta.** Every fall. MR. LACASCE.

Wave motion occurs in many areas of physics. A discussion of basic wave behavior and the principle of superposition leads to a study of wave propagation and its relationship to coherence, interference, and diffraction. The wave model of the atom provides an introduction to atomic spectra. The laboratory work provides experience with optical methods and instruments.

Prerequisite: **Physics 17** and previous credit or concurrent registration in **Mathematics 12**, or consent of the instructor.

- 28. Modern Physics.** Every spring. MR. CORSON.

An introduction to the basic concepts and laws of nuclear and particle physics, covering the principles of relativity and quantum theory, particle accelerators, nuclear structure and reactions, and the behavior of elementary particles. The physics of radioactivity and the biological, medical, and ecological applications of radiation are given special emphasis through weekly laboratory exercises with radioactive materials and nuclear instrumentation. Three hours of laboratory work a week.

Prerequisite: **Physics 17** and previous credit or concurrent registration in **Mathematics 12**, or consent of the instructor.

29. Statistical Physics. Fall 1984. MR. CORSON.

Develops a framework capable of predicting the properties of systems with many particles. This framework, combined with simple atomic and molecular models, leads to an understanding of such concepts as entropy, absolute temperature, and the canonical distribution. Some probability theory will be developed as a mathematical tool.

Prerequisite: **Physics 17** and previous credit or concurrent registration in **Mathematics 12**, or consent of the instructor.

30. Methods of Theoretical Physics. Every spring. MR. LACASCE.

Mathematics is the language of physics. Similar mathematical techniques occur in different areas of physics. A physical situation may first be expressed in mathematical terms, usually in the form of a differential or integral equation. After the formal mathematical solution is obtained, the physical conditions determine the physically viable result. Examples are drawn from heat flow, gravitational fields, and electrostatic fields.

Prerequisite: **Mathematics 13** or **22**, and **Physics 23, 27, or 28**.

31. Atomic Physics. Every fall. MR. CORSON.

An introduction to quantum theory, solutions of Schrodinger equations, and their applications to atomic systems.

Prerequisite: **Physics 27** and **30**.

32. Electromagnetic Theory. Every other spring. Spring 1986. MR. TURNER.

First the Maxwell relations are presented as a natural extension of basic experimental laws, then emphasis is given to the radiation and transmission of electromagnetic waves.

Prerequisite: **Physics 23** and **30**, or consent of the instructor.

35. Solid State Physics. Every other spring. Spring 1985. MR. CORSON.

The physics of solids, including crystal structure, lattice vibrations, and energy band theory.

Prerequisite: **Physics 31**.

37. Advanced Mechanics. Every other fall. Fall 1985. MR. TURNER.

A thorough review of particle dynamics, followed by the development of Lagrange's and Hamilton's equations and their applications to rigid body motion and the oscillations of coupled systems.

Prerequisite: **Physics 30** or consent of the instructor.

200. Independent Study. THE DEPARTMENT.

Programs of study for general relativity, the physics of thin films, biophysics, magnetic resonance, and low-temperature physics are available. Work done in these topics can serve as the basis for an honors paper. If the investigations concern the teaching of physics, this course

satisfies certain of the requirements for the Maine State Teacher's Certificate.

Adjunct Courses

2. Contemporary Astronomy. Every spring. MR. HUGHES.

A generally qualitative discussion of the nature of stars and galaxies, stellar evolution, the origin of the solar system and its properties, and the principal cosmological theories. Enrollment in this course is limited to students without credit or concurrent registration in **Physics 17**.

3. Physics of the Twentieth Century. Every fall. MR. HUGHES.

Although the physics of the eighteenth and nineteenth centuries enjoyed many great successes, there was by the end of the nineteenth century a growing awareness of the limitations of what we now call classical physics. This course traces the discovery of those limitations and the rise of modern physics. Topics discussed include the development of quantum mechanics and relativity, the origin and growth of nuclear and elementary particle physics, the rise of electronics, and those aspects of technology which have had a special relationship with physics.

Prerequisite: Ordinary secondary school mathematics. Enrollment is limited to students without credit for or concurrent registration in **Physics 14** or **17**.

[14. Energy.]

19. Astrophysics. Every fall. MR. HUGHES.

A quantitative discussion which introduces the principal topics of central importance in astrophysics, including stellar structure and evolution, planetary physics, and cosmology.

Prerequisite: **Physics 17**.

20. Physical Oceanography. Fall 1985. MR. LACASCE.

The aim is to provide a feel for the scope of physical oceanography. Among the topics covered are tidal theory, surface and internal waves, and the heat budget and its relation to the oceanic circulation. Some attention is given to the problems of instrumentation and the techniques of measurement.

Prerequisite: **Physics 17** and **Mathematics 11**.

24. Digital Electronics. Every other fall. Fall 1984. MR. TURNER.

An introduction to the basic principles of binary circuits and digital electronics. Topics include Boolean algebra and logic circuitry, binary numbers and computation, memory circuits and information storage, digital/analog conversion, and circuits for timing and control. The structure of digital instruments, calculators, and computers is covered

as time permits. Laboratory work with digital integrated circuits.

Prerequisite: **Physics 17**.

25. **Topics in Physics.**

Sound or Noise: Problems in Acoustics. Fall 1984. MR. LACASCE.

After an introduction to wave motion and propagation, the course examines the problems and techniques of acoustical measurements, including the ear and hearing. Selected topics covered as time permits include noise and the control of noise, building acoustics, underwater sound, and ultrasonics.

Prerequisite: **Physics 17**.

26. **Biophysics.** Every spring. MR. HUGHES.

An introduction including discussion of the effects of ionizing radiation on cells and tissues, the application of X-ray diffraction methods to biological problems, and other modern topics. Some attention is given to historical aspects of the subject and to the development of devices such as the electron microscope.

Prerequisite: **Physics 17, Chemistry 15, 16, and Mathematics 12**.

Psychology

ASSOCIATE PROFESSOR SMALL, *Chairman*; PROFESSOR FUCHS; ASSOCIATE PROFESSOR ROSE; ASSISTANT PROFESSORS HELD, JOHNSON, AND SCHAFFNER

Requirements for the Major in Psychology: The major comprises nine courses including **Psychology 1** and **11**; a minimum of three courses selected from **3, 6, 7, 9, 12, 13, and 25**; and at least two advanced courses. Students considering a major should consult with the department regarding course sequences. The department does recommend, however, that **Psychology 11** be taken in the sophomore year. During the senior year majors are encouraged to engage in independent study on a library, laboratory, or field research project.

Students who are interested in teaching as a career should consult with the Department of Education for courses to be included in their undergraduate program. Ordinarily, students of education will find much of relevance in **Psychology 7, 12, 23**; these courses cover the topics usually included in educational psychology. In addition, prospective teachers may find **Psychology 3, 6, and 10** compatible with their interests and helpful in their preparation for teaching.

Interdisciplinary Major: The department participates in an interdisciplinary program in psychobiology. See page 148.

Requirements for the Minor in Psychology: The minor comprises five

courses, including **Psychology 1** and **11**; and a minimum of three courses selected from **Psychology 3, 6, 9, and 12**.

Introductory Courses

1. **Introduction to Psychology.** Every semester. THE DEPARTMENT.

A general introduction to the major concerns of contemporary psychology including psychobiology, perception, learning, cognition, development, personality, states of consciousness, abnormal and social behavior. Recommended for freshmen and sophomores.

2. **A Neuropsychological History of the Brain and Mind.** Spring 1986. MR. ROSE.

A history of the study of the nervous system as related to behavioral activities and concepts including mentation. Periods of focus include Greek antiquity, the Renaissance, the eighteenth and nineteenth centuries, and the emergence of the current zeitgeist. Emphasizes the interaction of philosophical, social, technological, theoretical, and personal factors which preceded and led to the modern neuroscience era.

Intermediate Courses

3. **Personality.** Every fall. MS. HELD.

A comparative survey of theoretical and empirical attempts to explain personality and its development. The relationships of psychoanalytic, interpersonal, phenomenological, and behavioral approaches to current research are considered.

Prerequisite: **Psychology 1**.

4. **Abnormal Personality.** Every spring. MS. HELD.

A general survey of the nature, etiology, diagnosis, and treatment of common patterns of mental disorders. An optional, supervised practicum at a local psychiatric unit is available.

Prerequisite: **Psychology 3**.

5. **Political Psychology.** Every other year. Fall 1984. MR. SCHAFFNER.

An analysis of psychological aspects of political behavior, considering both prominent figures and the general public. Topics include the psychological nature of politics; ideology and the structure of belief systems; activism and alienation; political socialization; power tactics; political leadership; and psychobiography.

Prerequisite: **Psychology 3, 6, or Sociology 20**.

6. **Social Psychology.** Every spring. MR. SCHAFFNER.

A survey of theory and research on psychological aspects of social behavior. Topics include conformity, language and communication,

attitudes, prejudice and racism, social epistemology, decision making, and group conflict. Class research projects supplement readings and lectures. Social psychological aspects of race relations in the United States are a focal topic.

Prerequisite: **Psychology 1** or **Sociology 1**.

7. Developmental Psychology. Every spring. Ms. JOHNSON.

A survey of the physical, personality, social, and cognitive changes that occur from conception to adulthood. Where appropriate, such theoretical traditions as American S-R, psychoanalytic, information processing, and the epistemological approaches of Piaget are contrasted. An optional practicum with preschool or elementary school children is available.

Prerequisite: **Psychology 1**.

8. Behavior Systems Modeling. Every other year. Spring 1986. MR. SCHAFFNER.

Elementary concepts of modeling, with examples drawn from psychology and other behavioral sciences. Each student chooses a topic of interest, develops a model of a process within it, and writes and tests computer programs to implement the model. The course emphasizes collaborative outside work in addition to lectures. Both the DEC-10 and APPLE-II computers are used. Mathematical sophistication is not assumed, but a working knowledge of PASCAL or FORTRAN is essential.

Prerequisite: **Computer Science 5** and at least one post-introductory social science course.

9. Introduction to Psychobiology. Every fall. MR. ROSE.

An introduction to the scientific analysis of the mind-body relationship with special emphasis on the neurosciences. Topics include sociobiology, neurophysiology, psychopharmacology, perceptual systems, as well as brain mechanisms in sleep-wakefulness-attention, normal and abnormal emotional behaviors, learning, memory, and language. A series of labs gives students experience with methods used in the field which can lead to advanced individual projects in **Psychology 20**. This course is designed for students interested in brain-behavior issues but who have limited experience in psychology and biology. Biology and biochemistry majors interested in the field are requested to take **Psychology 20**.

Prerequisite: **Psychology 1**, **Biology 11**, or consent of instructor.

10. Atypical Child. Alternate years. Fall 1984. Ms. HELD.

A comparative understanding of different theories and data concerning the etiology, development, diagnosis, and treatment of vari-

ous forms of childhood exceptionality. A family systems viewpoint is emphasized.

Prerequisite: **Psychology 3 or 7.**

11. Statistical Methods for the Behavioral Sciences. Every fall. Mr. SCHAFFNER.

An introduction to the use of descriptive and inferential statistics in behavioral research. Weekly laboratory work in computerized data analysis. Required of majors no later than the junior year.

Prerequisite: **Psychology 1, Sociology 1,** or consent of the instructor.

12. Cognition. Every spring. Mrs. SMALL.

An analysis of research methodology and experimental investigations in cognition, which includes attention, memory, comprehension, thinking, and problem solving. Laboratory work, including experimental design.

Prerequisite: **Psychology 11.**

13. Perception. Every other year. Fall 1985. Mr. ROSE.

A survey of the basic phenomena and problems of perception and sensory psychology. Topics include psychophysics; coding of sensory qualities such as color, pitch, touch, and pain; the influence of early experience, culture, attention, and altered states of consciousness. Laboratory work included.

Prerequisite: **Psychology 1 and 11,** or consent of the instructor.

14. Comparative Neurobiology and Behavior.

See **Biology 43,** page 100.

16. Infancy. Fall 1985. Ms. JOHNSON.

An examination of current research concerning human development during the prenatal period and the first two years after birth. The topics to be covered include developments in sensation, perception, memory, cognition, personality, social behavior, and motor skills.

Prerequisite: **Psychology 11.**

17. Language. Fall 1984. Ms. JOHNSON.

An analysis of how language is produced and understood. The topics to be covered include speech perception, speech production, comprehension, language development, and the relationship between language and other cognitive processes. Laboratory work included.

Prerequisite: **Psychology 11.**

18. Collective Behavior.

See **Sociology 20,** page 194.

22. History and Systems of Psychology. Spring 1985. Ms. JOHNSON.

An examination of the history of major theoretical traditions in psychology, including both the philosophical antecedents of psychology and the changes that have taken place since the establishment of psychology as a science.

Prerequisite: At least three intermediate or advanced courses in psychology (excluding Psychology 11), or consent of instructor.

24. Law and Psychology. Every other year. Spring 1985. Ms. HELD.

Presents topic areas where there is an interface between psychological and legal issues. The first emphasis will be on how psychology can study and aid the legal process. The second emphasis will assess the special concerns of the mental health professional within the legal system. Limited to thirty students. No freshmen admitted.

Prerequisite: Psychology 1.

25. Comparative Psychology. Every other year. Fall 1984. MR. ROSE.

An examination of current issues in the evolution and development of behavior from a comparative psychology-ethology-neuroscience perspective. The influence of biological constraints on developing, species-typical behavior is emphasized. Topics include behavioral development (nature-nurture controversy), critical periods, effects of early experience, courtship-mating-parenting, behavioral patterns and rhythms, sensory-perceptual systems, and learning and social behavior in different species including man.

Prerequisite: Psychology 1 and 11, or consent of instructor.

Advanced Courses

15. Research in Personality and Social Psychology. Spring 1985. MR. SCHAFFNER.

A laboratory course on research design and methodology in social and personality psychology, focusing on a topic of current theoretical importance. Students plan and carry out original research.

Prerequisite: Psychology 3 or 6, and Psychology 11.

19. Clinical Psychology. Every other year. Fall 1985. Ms. HELD.

The history and development of clinical psychology including an emphasis on current controversies regarding ethical and legal issues. Major portions of the course are devoted to theory and research concerning psychological assessment and types of psychotherapies.

Prerequisite: Psychology 4 or 10.

20. Fundamentals of Neuroscience. Every spring. MR. ROSE.

A survey of modern topics and techniques in the subdisciplines of neuroanatomy including neurohistology, neurophysiology, neurophar-

macology, and neurobehavioral testing in both animal and human subjects. In addition to a comprehensive analysis of current literature, hands-on competence is gained in basic research design and methodology, leading to specific studies by teams working on multidisciplinary problems.

Prerequisite: **Psychology 9** or at least one post-introductory course in biology, and consent of the instructor.

[21. Individual Differences.]

23. **Cognitive Development.** Every fall. MRS. SMALL.

The development of mental representation and cognitive processes from infancy to early adulthood. Emphasis on experimental research and related theories of cognitive development, especially on the development of perception, memory, learning, comprehension, thinking, and problem solving.

Prerequisite: **Psychology 11**, and **Psychology 7** or **12**.

28. **Language Development.** Spring 1986. Ms. JOHNSON.

Provides a survey of current research and theory in language development. Although the focus is on spoken language, the development of written language is considered. Where appropriate, language development in "normal" children is compared with language development in atypical children (e.g., children with sensory or cognitive impairments), and human language is considered with communication systems used by other species. Laboratory work included.

Prerequisite: **Psychology 11** and **Psychology 7** or **17**.

Seminars

[26. Topics in Psychology.]

200. **Independent Study.** THE DEPARTMENT.

Religion

PROFESSOR GEOGHEGAN, *Chairman*; PROFESSOR LONG; ASSOCIATE PROFESSOR HOLT; VISITING ASSISTANT PROFESSOR WAGHORNE

The primary and central purpose of the religion major is to provide means for the study of the distinctive subject matter of religion in a liberal arts context. Methods employed in other liberal arts and sciences are also used in the study of religion. Although the department does not provide specific preprofessional training, the study of religion as one of the liberal arts and sciences does have a vocational bearing, particularly as preparation for graduate work.

Each major is assigned a departmental adviser who assists the student in formulating a plan of study in religion and in related courses in other departments, such as languages for those planning graduate study. The adviser may also provide counsel in vocational planning. Students who continue in the study of religion after college usually do so in an M.A. or Ph.D. program at a graduate school or in a B.D. or M.Div. program at a divinity school or theological seminary. Information about other options is available through departmental advisers.

Requirements for the Major in Religion: The major consists of at least eight courses in religion approved by the department. **Religion 1** must be taken not later than the sophomore year. One freshman-sophomore seminar may count toward the major but cannot be substituted for **Religion 1**. Each major must take at least one course from each of the following three groups: (a) religions of South or East Asian origin (**Religion 14, 16, 17, 18**); (b) religions of Near Eastern origin (**Religion 20, 21, 22, 23, 24, 25**); (c) religious thought (**Religion 9, 10, 31, 32, or 40**).

Interdisciplinary Major: The department participates in an interdisciplinary program in art history and religion. See page 148.

Independent Study: A student proposing to undertake an independent study project under the supervision of a faculty member of the department must submit, not later than April 1 or November 1 of the semester *before* which he or she wishes to pursue the project, a plan for it on a form to be obtained from the department. The department faculty will review applications and only on the basis of its approval may the project be undertaken. This regulation also applies to honors proposals.

Honors in Religion: Students contemplating honors candidacy should possess a record of distinction in departmental courses, including those which support the project, a clearly articulated and well-focused research proposal, and a high measure of motivation and scholarly maturity. It is recommended that such students complete *two semesters* of independent study in preparing research papers for honors consideration.

Requirements for the Minor in Religion: The requirements for the minor may be fulfilled in any one of three ways: (1) **Religion 1**, one course from each core area, and a 2- or 40-level seminar; (2) **Religion 1** and any two pairs of related semester sequences in any one of the three core areas offered by the department; (3) **Religion 1**, one pair of related semester sequences, and a 2- and a 40-level seminar. The three core areas are religions of South and East Asian origin, religions of Near Eastern origin, and religious thought.

†1. **Introduction to the Study of Religion.** Fall 1984. MR. GEOGHEGAN. Spring 1985. MS. WAGHORNE.

Basic concepts, methods, and issues in the study of religion, with

special reference to examples comparing and contrasting Eastern and Western religions. Lectures, discussions, and readings in classic texts and modern interpretations.

Religion 2 Freshman-Sophomore Seminars

The seminars are introductory in nature, focusing on the study of a specific aspect of religion, and may draw on other fields of learning. They are not intended as prerequisites for more advanced courses in the department unless specifically designated as such. They include readings, discussions, and reports.

Topics change from time to time to reflect emerging or debated issues in the study of religion.

Enrollment is limited to twenty students for each seminar. Freshmen are given priority for available spaces.

Seminars may be repeated for credit with contents changed.

Religion 2, 1984-1985

Seminar 1. History and Myth: East and West. Fall 1984. Ms. WAGHORNE.

A cross-cultural study of the meaning and use of "history" as a dimension of religious experience. Emphasis on the inter-relationship of secular history, sacred history, and myth in the development of patterns of political and social leadership in ancient and modern times.

†**Seminar 2. Paradigms of Human Perfection in China and Japan.** Fall 1984. Ms. WAGHORNE.

A study of the conflicting and converging ideals of human religious development in the Far East. Consideration of the ancient role of the king, the Confucian scholar, the Taoist sage, and the Buddhist in China and the aesthetic woman, the poet-ruler, and the Zen monk in Japan. Discussion of the effect of these images in modern society.

3. The Bible in Literary Focus. Fall 1984. MR. LONG.

A study of selected biblical narratives and poems with emphasis upon the Bible's diverse imaginative worlds, both religious and secular. Attention also given to the Bible as wellspring of images and motifs for western literary artists. Same as English 5.

[9. Psychology and Religion.]

10. Philosophy of Religion. Spring 1985. MR. GEOGHEGAN.

Survey of development of the interaction between religion and philosophy in the West from the Bible and Plato to the present. Readings in a variety of contemporary primary sources. Discussion of a variety

of basic topics with emphasis on the problem of evil. Conducted as seminar with brief weekly papers.

Prerequisite: Religion 1 or consent of the instructor.

†[14. Fundamentals of Hinduism.]

†[16. Theravada Buddhism.]

†[17. Chinese Religion.]

†[18. Buddhism in China and Japan.]

[20. Hebraic Origins.]

[21. Judaism.]

22. **Christian Origins.** Fall 1984. MR. LONG.

A comparative, historical, and cultural study of Christian literature and religion with attention to the varieties of early Christianity. Lectures, discussions, readings, and interpretations of biblical and non-biblical sources, along with contemporary reflections.

23. **Christianity in Late Antiquity.** Spring 1985. MR. LONG.

The shaping of Christianity in factional struggles with rival paths to "salvation" from the Greco-Roman world. Topics include: Christian spirituality, saint-hero cults, and the androgynous God; Christian mysteries, Gnosticism, and oriental mystery religions; Christian belief and philosophical rivals. Readings from primary sources, including modern legacies of these ancient struggles.

24. **Prophetism and Religion.** Spring 1985. MR. LONG.

A historical and comparative study of Hebraic prophets with reference to prophets, shamans, and diviners of other peoples, such as in Africa, Asia, and North America. Special attention given to the legacy of Biblical prophets in western religions, literature, and philosophy.

†[31. Ancient and Medieval Western Thought.]

[32. Modern and Contemporary Western Religious Thought.]

40. **Advanced Topics in Religion.**

The study in depth of a topic in religion of comparatively limited scope, such as one or two individuals of major importance or a community of significance; a movement, type, concept, problem, period, or theme. Topics may change from time to time, and the courses may consider contributions from related fields.

Prerequisites, if any, are determined by the instructor.

Topics courses may be repeated for credit with contents changed.

40, 1. **Myth, Symbol, and Mysticism.** Fall 1984. MR. GEOGHEGAN.

A study, bringing together several disciplinary approaches, of reports of major types of mystical experience—primitive, naturalistic, monistic, theistic, and apophatic—from a variety of religious traditions: eastern and western, ancient, medieval, and modern. Emphasis upon primary sources. Conducted as a seminar with brief weekly papers.

Prerequisite: **Religion 1** or consent of instructor.

40, 2. **Gods of Flesh/Gods of Stone: The Embodiment of Divinity in Asia and the West.** Spring 1985. MS. WAGHORNE.

A reexamination of “idolatry” and “possession” as a cross-cultural religious system in which divinity takes material form. Western concepts of incarnation, resurrection, transubstantiation, and iconolatry compared with the Hindu theology of *avatāra*, image-worship, and the divine guru.

Prerequisite: **Religion 1** or consent of instructor.

40, 3. **Analytical Psychology and Religion.** Spring 1985. MR. GEOGHEGAN.

A study of works by Jung and a variety of Jungians dealing with the interaction between psychology and religion. Primary sources will include Jung’s *Memories, Dreams, Reflections, Two Essays in Analytical Psychology*, and *Psychology and Religion: West and East* and works by Robertson Davies, Erich Neumann, and James Hillman. Conducted as a seminar with brief weekly papers.

Prerequisite: **Religion 1** or **Psychology 1** or consent of the instructor.

200. **Independent Study.** THE DEPARTMENT.

Romance Languages

PROFESSOR TURNER, *Chairman*; PROFESSOR THOMPSON; ASSOCIATE PROFESSORS BROGYANYI AND NUNN; ASSISTANT PROFESSORS ALAIN FRESCO AND KAREN FRESCO; LECTURER PELLEGRINI; INSTRUCTORS HUNSINGER AND VANDERWOLK; TEACHING FELLOWS LACASSAGNÈRE, LAFONT, AND LUENGO

The Department of Romance Languages offers courses in French, Spanish, and Italian language and literature. Native speakers are involved in most language courses. Literature courses are conducted in the respective language.

Courses in English Translation: Each year the department offers at least one course in English translation. These courses are listed under the respective

language and are numbered 22. Such courses may be taken for major credit only if the student's primary focus is another language.

Study Abroad: A period of study in an appropriate country, usually in the junior year, is strongly encouraged for all students of language. Bowdoin College is affiliated with a broad range of programs abroad and interested students should seek the advice of a member of the department early in their sophomore year.

Independent Study: Students who are well on their way to fulfilling the major requirements may apply to a member of the department for independent study. Such requests should be for a program of directed readings in the area of a teacher's expertise and should be made as early as possible.

Honors in Romance Languages: Majors may elect to write an honors project in the department. This involves two semesters of independent study in the senior year and the writing of an honors essay and its defense before a committee of members of the department. Candidates for department honors should also have a strong record in other courses in the department.

Requirements for the Major in Romance Languages: The major consists of eight courses more advanced than **French, Spanish, or Italian 4**. In French and Spanish these will normally be **5, 9, 11, 12** and four other courses. The major may consist entirely of courses in either French or Spanish, or it may involve a combination of courses in French, Spanish, and Italian. It is expected that majors who are not writing an honors project, will enroll in a topics course in their senior year. No more than two courses may be in independent study and no fewer than four Bowdoin courses should be taken. Prospective majors are expected to have completed **French or Spanish 5 and 9** before the end of their sophomore year.

Requirements for the Minor in Romance Languages: The minor consists of three Bowdoin courses above the level of **French, Spanish, or Italian 4**.

French

†1, 2. **Elementary French.** Every year. MR. VANDERWOLK.

Study of the basic forms, structures, and vocabulary. Emphasis on listening comprehension and spoken French. During the second semester, some stress is placed on reading. There are regular language laboratory assignments.

†3. **Intermediate French I.** Every fall. MS. FRESCO.

A one-semester review of basic French grammar. Written and oral exercises. Three class hours per week plus regular language laboratory assignments.

Placement on the basis of a test set by the department at the start of the fall semester.

†4. **Intermediate French II.** Every spring. MESSRS. FRESCO AND NUNN.

Reading for acquisition of idioms and vocabulary, frequent short written exercises, practice in speaking. Three class hours per week, plus regular language laboratory assignments and sessions with the French teaching fellows.

Prerequisite: **French 3.**

†5. **Advanced French.** Every fall. MR. NUNN.

Aims to increase fluency in spoken and written French. Grammar review, one hour a week plus language laboratory. Reading and discussion of short fiction of France, Canada, and Africa, two hours a week. Conversation with French teaching fellows, one hour a week. Frequent written and oral assignments.

†6. **Advanced French II.** Every spring. MR. NUNN.

Continuation of **French 5.** Grammar review, one hour a week plus language laboratory. Reading and discussion of articles and books dealing with contemporary France, two hours a week. Conversation with French teaching fellows, one hour a week. Regular written and oral assignments.

†7. **French Pronunciation and Conversation.** Every fall. MR. NUNN.

One hour per week, study of corrective phonetics, with regular exercises in the language laboratory; two hours per week, conversations with the French teaching fellows on prepared topics. Enrollment limited to twelve. One-half course credit.

Prerequisite: **French 5** or consent of the instructor.

†[8. **French Pronunciation and Conversation.**]

†9. **Introduction to French Literature.** Every semester. Fall 1984. MR. BROGYANYI. Spring 1985. MR. VANDERWOLK.

An approach to the appreciation and analysis of French literature through close reading in class, short papers, and discussions of selected poems and short prose works from various periods of French literature. The major writers selected include Molière, Corneille or Racine, Ronsard, La Fontaine, Hugo, Maupassant, Gide, etc. The aim is to introduce the student to a critical approach to literature in general and to French literature in particular. Though this is not a survey course, it provides illustrations of chronological succession in literature. Papers and lectures in French.

Prerequisite: **French 5** or appropriate score on the placement test administered by the department at the start of the fall semester.

†11. Survey of French Literature I. Every fall. Ms. FRESCO.

A broad introduction to French literature from the medieval period through the Renaissance. Individual works studied in the context of major literary and historical developments. Principal authors and works include *La Vie de Saint Alexis*, *La Chanson de Roland*, Marie de France, Chrétien de Troyes, *Le Roman de la Rose*, Rabelais, DuBellay, Ronsard, and Montaigne.

Prerequisite: French 9 or consent of the instructor.

†12. Survey of French Literature II. Every spring. MR. NUNN.

A continuation of French 11, emphasizing texts of the seventeenth and eighteenth centuries which have had a major influence on French thought. Principal authors: Montaigne (*Essais*), Descartes (*Discours de la méthode*), Pascal (*Pensées*), Molière (*Tartuffe*), La Fontaine (*Fables*), La Bruyère (*Caractères*), La Rochefoucauld (*Maximes*), La Fayette (*La Princesse de Clèves*), Voltaire (*Lettres philosophiques*), Diderot (*Supplément au voyage de Bougainville*), D'Alembert (*Discours préliminaire*), Rousseau (*Rêveries d'un promeneur solitaire*).

Prerequisite: French 9 or consent of the instructor.

[13. French Poetry I.]

14. French Poetry II. Every third year. Spring 1985. MR. FRESCO.

A study of the evolution of modern French poetry from Baudelaire to the present. Close attention paid to representative literary trends and to the theory and practice of poets such as Mallarmé, Verlaine, Rimbaud, Valéry, Breton, Apollinaire, Char, and others.

Prerequisite: French 9 or consent of the instructor.

†16. French Drama. Every third year. Spring 1987.

Critical study of dramatic theory and practice of the modern period. The principal authors studied are Jarry, Claudel, Cocteau, Giraudoux, Montherlant, Anouilh, Sartre, Ionesco, Beckett, and Genet. Conducted in French.

Prerequisite: French 4, 9, or consent of the instructor.

17. The French Novel I. Every third year. Fall 1985.

The development of the genre during the nineteenth century, with emphasis on the works of Balzac, Stendhal, Flaubert, and Zola. Conducted in French.

Prerequisite: French 9 or consent of the instructor.

18. The French Novel II. Every third year. Spring 1986.

A continuation of French 17, from realism to the *nouveau roman*. The principal authors studied are Gide, Proust, Malraux, Sartre, Camus, and Butor. Conducted in French.

Prerequisite: French 9 or consent of the instructor.

19. Seminars for Freshmen and Sophomores.

Designed for students who have completed French 9 or an equivalent introduction to the study of literature. The course involves a great deal of oral and written work designed to improve linguistic competence as well as analytic skills.

Prerequisite: **French 9** or consent of instructor.

From Illusion to Commitment: The Modern French Short Story. Fall 1984. MR. VANDERWOLK.

A study of the short story tradition of the nineteenth and twentieth centuries in France. Readings include works by Mérimée, Flaubert, Maupassant, Aymé, Sartre, and Camus.

†20. Topics in French Literature and Culture I.

Designed to offer students who have a general knowledge of French literature and civilization the opportunity to study in greater depth individual authors, particular themes, or aspects of French civilization. Conducted in French. *The course may be repeated for credit with the contents changed.*

This course is intended primarily for seniors.

French Drama of the Seventeenth and Eighteenth Centuries. Fall 1984. MR. BROGYANYI.

A survey of classicism and the major new currents of the eighteenth century. Plays by Corneille, Molière, Racine, Marivaux, Sedaine, and Beaumarchais read. Oral presentations in class, as well as written papers.

21. Topics in French Literature and Culture II.

French Existentialism. Spring 1985. MR. BROGYANYI.

A study of the major aspects of the philosophies of de Beauvoir, Camus, and Sartre, based on their fiction and on selected theoretical texts.

22. French Literature in Translation.

Racism and the African Reaction: A Dialectical Study of Modern French African Literature. Fall 1984. MR. FRESCO.

Begins with a study of the eighteenth- and nineteenth-century thinkers who propagated the myth of white supremacy. Continues with the poets of *Négritude*. Ends with the concerns of postindependence novelists and thinkers.

Enrollment limited to twenty students.

Italian

†1, 2. Elementary Italian. Every year. Ms. PELLEGRINI.

Three class hours a week and one weekly drill session with assistant.

An introduction to Italian grammar and elementary reading, writing, and speaking skills. Some required laboratory work.

†3, 4. **Intermediate Italian.** Every year. Ms. PELLEGRINI.

Development of oral and written expression in Italian, accompanied by a review of fundamentals. Three class hours a week. In both courses, modern Italian short stories and current news items serve as a basis for conversation and written assignments, as well as grammar study.

22. **Italian Literature in Translation.**

Classic Italian Literature. Fall 1984. Mr. BROGYANYI.

Introduction to the Three Crowns of Florence—Dante, Petrarch, and Boccaccio—through the study of representative works. The historical and cultural context of the first and greatest flowering of Italian literature is emphasized. Lectures, discussions, short papers and oral presentations, and one long paper at the end of the term.

200. **Independent Study.** Mr. BROGYANYI.

Spanish

†1, 2. **Elementary Spanish.** Every year. Fall 1984. Mr. TURNER. Spring 1985. Ms. HUNSINGER.

Three class hours per week plus drill sessions and laboratory assignments. An introduction to the grammar of Spanish, aiming at comprehension, reading, writing, and simple conversation. Emphasis in the first semester is on grammar structure, with frequent oral drills. In the second semester more attention will be paid to reading and writing.

†3, 4. **Intermediate Spanish.** Every year. Fall 1984. Ms. HUNSINGER. Spring 1985. Mr. THOMPSON.

Three class hours a week and a conversation session with the teaching assistant. Grammar fundamentals are reviewed and class conversation and written assignments will be based on readings in modern literature.

Prerequisite: **Spanish 2** or appropriate score on a placement test set by the department at the start of the fall semester.

†5. **Advanced Spoken and Written Spanish.** Every fall. Mr. THOMPSON.

Intended to develop fluency and to increase the range of expression in both speech and writing through the intensive study of selected grammatical topics and word differentiation.

Prerequisite: **Spanish 4** or appropriate score on a placement test set by the department at the start of the fall semester.

†9. **Introduction to the Study and Criticism of Hispanic Literature.** Every spring. Mr. TURNER.

Intended to develop an appreciation of the major genres of literature

in Spanish and to foster the ability to discuss them orally and in writing. Personal responses as well as the use of critical methods encouraged in discussions with the teacher and the teaching assistant. The three works to be studied are José Zorrilla's *Don Juan Tenorio*, *Poesía escogida* by García Lorca, and Carlos Fuentes's *La muerte de Artemio Cruz*.

†11. Readings in Modern Spanish American Literature. Every fall. MR. TURNER.

A survey of the Spanish American literary tradition from modernism to the present.

Prerequisite: Spanish 9 or permission of instructor.

†12. Readings in Modern Spanish Literature. Every spring. MR. THOMPSON.

A survey of the major currents and writers of Spanish literature from the eighteenth century to the modern period.

Prerequisite: Spanish 9 or permission of instructor.

†13. Topics in Spanish and Hispanic-American Literature I.

Designed to provide students who have a general knowledge of Spanish literature the opportunity to study in depth selected authors, genres, and literary movements. Conducted in Spanish, Spanish 13 and 14 may be repeated for credit with the contents changed.

Prerequisite: Spanish 11, 12 or consent of the instructor.

Spanish Theater from the Golden Age to the Present. Fall 1984. MR. THOMPSON.

†14. Topics in Spanish and Hispanic-American Literature II.

Twentieth-Century Latin American Women Writers. Spring 1985. MS. HUNSINGER.

22. Spanish Literature in Translation.

Twentieth-Century Latin American Literature.

Every other spring. Spring 1985. MR. TURNER.

Study of major works of prose and poetry in recent Latin American literature. Authors studied include Borges, Cortázar, García Márquez, Neruda, and Vargas Llosa.

It is not open to students who have taken Spanish 11 with the same topic.

200. Independent Study. THE DEPARTMENT.

Russian

ASSOCIATE PROFESSOR KNOX; *Chairman*; ASSOCIATE PROFESSOR RUBIN;
ASSISTANT PROFESSOR MILLER

At present, there is, strictly speaking, no Russian major. But students may pursue a self-designed major ("Russian-Soviet Area Studies" in several departments), or an interdisciplinary major (concentration in two departments). The Department of Russian normally requires these students to complete four years of language study, one year of literature in translation, and one year of independent study. But it is prepared to accept the substitution of related offerings from other departments (e.g., Russian History) for its advanced-level courses. Students may do an honors project in the Russian Department on an exclusively departmental topic.

Requirements for the Minor in Russian: The minor consists of any four courses beyond Russian 4, one of which must be a literature in translation course.

†1, 2. **Elementary Russian.** Every year. Fall 1984. Ms. KNOX.

Emphasis on the acquisition of language skills through imitation and repetition of basic language patterns; the development of facility in speaking and understanding simple Russian. Conversation hour with native speaker.

†3, 4. **Intermediate Russian.** Every year. Fall 1984. MR. MILLER.

A continuation of Russian 1-2. Concentration on maintaining and improving the student's facility in speaking and understanding normal conversational Russian. Conversation hour with native speaker.

Prerequisite: Russian 1-2.

5, 6. **Advanced Russian.** Every year. 1984-1985. MR. MILLER.

Intended to develop the ability to read Russian fluently by combining selected language and literature readings, grammar review, and analysis of Russian word-formation. Discussion and written reports. Conversation hour with native speaker.

Prerequisite: Russian 3, 4.

†9, 10. **Special Topics in Russian.** Every year. 1984-1985. Ms. KNOX.

Intended to enable the individual student to utilize his knowledge of Russian as a research tool in the investigation of a particular topic. With an enrollment of more than one, the course is run as a literature seminar. *The course may be repeated for credit with the contents changed.*

Prerequisite: Russian 5, 6 and consent of the instructor.

- †19. **Nineteenth-Century Russian Literature in Translation.** Every other fall. Fall 1985.

Works of the great Russian writers Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky, and Tolstoy are read. The course is concerned with the development of Russian prose from the short fiction of the earlier writers to the great Russian novels of the second half of the nineteenth century. Russian realism, its development and trends, will be discussed as a common denominator of nineteenth-century prose.

- †20. **Twentieth-Century Russian Literature in Translation.** Every other spring. Spring 1986.

The course is divided into a two-part discussion of twentieth-century Russian prose before and after the official proclamation of Socialist Realism. The first half is devoted to the innovative modernism of the first two decades. The second half is a discussion of the return to didactic realism and the emergence of an underground movement of dissidence. Writers discussed are Andreyev, Bely, Olesha, Zoshchenko, Zamyatin, Sinyavsky, Bulgakov, Pasternak, Solzhenitsyn, Brodsky, and Aksyonov. Majors are required to do some of readings in Russian.

- †21. **Women in Russian Society and Culture.** Fall 1984. Ms. KNOX.

Examination of the roles women have played in Russian literature and society at large. Feminine models from the novels *Eugene Onegin* (Pushkin), *What Is To Be Done* (Chernyshevsky), *Anna Karenina* (Tolstoy), and Gorky's *Mother* viewed from the perspective of societal roles traditionally assigned to women. Special attention given to women revolutionaries. Discussion based on autobiographies and nonfiction works by women. Other topics include women's work, wages, and social services and the recent feminist movements in the Soviet Union. Guest lecturers. Russian students will be encouraged to do some reading in Russian.

22. **Dostoevsky and the Novel.** Every other year. Spring 1985. Ms. KNOX.

Intended to analyze Dostoevsky's use of this genre to portray the "fantastic" reality of the city and its effects on the narrator's perspective. Special attention given to the author's quest for guiding principles of faith and love in a world of violent chaos, cynicism, and urban neuroses. Emphasis on the tragedy of freedom, and the conflicting concepts of free will and determinism.

200. **Independent Study.** THE DEPARTMENT.

An original piece of research in which an attempt is made to elicit from the student a contribution to the field of Russian literary studies.

Sociology and Anthropology

PROFESSOR KERTZER, *Chairman*; PROFESSOR ROSSIDES; ASSOCIATE PROFESSOR
MCEWEN; ASSISTANT PROFESSORS BELL, BOLLES, AND FLOGE;
VISITING ASSISTANT PROFESSOR HAYES

Requirements for the Major: In consultation with an adviser, each student plans a major program that will nurture an understanding of society and the human condition, demonstrate how social knowledge is acquired through research, and enrich his or her general education. On the practical level, a major program prepares the student for graduate study in sociology and anthropology and contributes to preprofessional programs such as law and medicine. It also provides background preparation for careers in urban planning, the civil service, social work, business or personnel administration, social research, law enforcement and criminal justice, the health professions, journalism, secondary school teaching, and programs in developing countries.

Courses are grouped in three levels. Level A courses have no prerequisites and are introductory in nature. **Sociology 1** and **Anthropology 1** are recommended for freshmen and sophomores. One of these two courses is prerequisite for Level B courses, unless consent is received from the individual instructors. In addition, **Anthropology 16, 17, and 18**, and **Sociology 5** are topics courses without prerequisites.

Level B courses are generally recommended for students with at least sophomore standing. Level C courses—an advanced seminar with changing topic, **Anthropology 20**, and independent study—are open to students with junior or senior standing who have completed at least two courses in the department.

A student may choose either of two major programs or two minor programs:

The Major in Sociology consists of eight courses, including **Sociology 9, 11**, and one Level C course. A minimum of six courses in sociology may be supplemented by two advanced courses from anthropology or, as approved by the department chairman, by two courses from related fields to meet the student's special needs. **Sociology 11** should be taken in the sophomore year.

The Major in Anthropology/Sociology consists of eight courses in the department: a minimum of five in anthropology, including **Anthropology 1, 3, 20**; **Sociology 11**; and a minimum of two other courses in sociology (not including **Sociology 1**).

The Minor in Sociology consists of five sociology courses, including **Sociology 9** and **11** and one Level C course.

The Minor in Anthropology consists of five anthropology courses, including **Anthropology 3** and **20**.

For either major or minor program, one semester of independent study may be counted.

Departmental Honors: Students distinguishing themselves in either major program may apply for departmental honors. Awarding of the degree with honors will ordinarily be based on honor grades in major courses and a written project (emanating from independent study), and will recognize the ability to work creatively and independently and to synthesize diverse theoretical, methodological, and substantive materials.

Level A Courses Sociology

1. Introduction to Sociology. Every semester. THE DEPARTMENT.

The major perspectives of sociology. Application of the scientific method to sociological theory and to current social issues. Theories ranging from social determinism to free will are considered, including the work of Marx, Weber, Durkheim, Merton, and others. Attention is given to such concepts as role, status, society, culture, institution, personality, social organization, the dynamics of change, the social roots of behavior and attitudes, social control, deviance, socialization, and the dialectical relationship between individual and society.

5. Sociology of Health and Illness. Every fall. Ms. BELL.

This course examines the social contexts of physical and mental health, illness, and medical care. Deals with such topics as the structure and processes of health care organizations; the social, environmental, and occupational factors in health and illness; development of health professions and the health work force; doctor-patient relationships; the illness experience; health care and social change (e.g., the women's health movement, holistic health care, socialized medicine).

Prerequisite: Freshmen require consent of the instructor; open to all others.

Anthropology

1. Introduction to Anthropology. Every fall. MR. KERTZER.

Study of human biological and cultural evolution. The four major subfields of anthropology are discussed: physical anthropology, archaeology, social linguistics, and social anthropology. Among the subjects covered are conflicting theories of human biological evolution, the debate over the genetic bases of human behavior, the scientific validity of the concept of race, the settling of the New World, the rise of agricultural and urban societies, the nature of "primitive" cultures, and the extent to which people are products of their culture.

†16. Modern Italy. Spring 1985. MR. KERTZER.

An overview of the development of modern Italian society, beginning

with the unification of Italy in the mid-nineteenth century. Particular attention is paid to topics in social and political history, including the changing role of the Church and religion, the rise of the peasant leagues and the early socialist movement, life in the Fascist period, the successes and crises of the Italian Communist Party, changes in family life and in male-female relations, the enduring conflict between northern and southern Italy, and the social implications of migration.

Prerequisite: Sophomore standing.

†17. **African-American Cultures.** Spring 1985. Ms. BOLLES.

See *Afro-American Studies* 1, page 89.

†18. **Latin American Societies.** Spring 1986. Ms. BOLLES.

Emphasizes contemporary cultures and peoples of Latin America. Attention is paid to pre-Columbian societies which provide background for understanding the processes of social change. Course presents a historical, economic, and social overview. Covered are native and *campesino* cultures, and the urban working classes, with special references to women.

Level B Courses

Sociology

3. **The Family.** Spring 1985. Ms. BELL.

The diversity of the family as a social institution in different times and places illuminates our understanding of the American family. An examination of contemporary research on the family life cycle, variation in family composition, and trends in family living. The family is considered from several theoretical perspectives, leading to more comprehensive knowledge of this institution and the central role it plays in human life.

Prerequisite: **Sociology 1, Anthropology 1**, or consent of the instructor.

6. **Urban Sociology.** Spring 1986. Ms. FLOGE.

An investigation into the diverse social patterns of urban life. Attention given to the expansion of urban populations in different cultural settings, contrasting the course of urbanization in the West and in traditional societies. The changing relation of urban centers to the rest of society is also analyzed, along with some of the problems generated by urbanization and contemporary approaches to resolving them. Students have an opportunity to study a particular aspect of urban society in depth.

Prerequisite: **Sociology 1, Anthropology 1**, or consent of the instructor.

8. **Race and Ethnicity.** Fall 1984. MR. McEWEN.

The social and cultural meaning of race and ethnicity with special emphasis on the politics of events and processes in contemporary Amer-

ica. Analysis of the causes and consequences of prejudice and discrimination. Examination of the relationships between race and class. Comparisons between the status of racial and ethnic minorities in the United States and their status in other selected societies.

Prerequisite: **Sociology 1, Anthropology 1**, or consent of the instructor.

9. Social Theory. Every spring. MR. ROSSIDES.

A critical examination of some representative theories of the nature of human behavior and society. Social theory is related to developments in philosophy and natural science, and symbolic developments as a whole are related to social developments. The thought of some major figures in the ancient world (especially Plato, Aristotle, and the Stoics) and the medieval world (especially St. Thomas and Marsileo of Padua) is analyzed, but the main focus is on the figures who have struggled to explain the nature of capitalism, especially Hobbes, Locke, the *philosophes*, Comte, Spencer, Sumner, Ward, and with special attention, some of the great theoreticians of the "contemporary" world: Marx, Durkheim, Weber, Simmel, Pareto, Lenin, Cooley, Mao, Marcuse, Parsons. The course's main purpose is to provide the student with an opportunity to test familiar ideas and to acquire new ones about the nature of society, especially the structure and dynamics of industrial society.

Prerequisite: **Sociology 1, Anthropology 1**, or consent of the instructor. Freshmen require the consent of the instructor.

10. Sociology of Work and Organizations. Spring 1986. Ms. BELL.

Exploration of the structure, function, and meaning of work in modern industrial society, especially the United States. Examination of the rise and composition of the industrial labor force and the experiences of workers in different occupations and professions. Also analysis of the growth of complex organizations (bureaucracies) as well as their impact on and response to broader society from a variety of sociological perspectives. Consideration of alternatives (e.g., cooperatives, collectives). Students may study a particular occupation or profession in depth.

Prerequisite: **Sociology 1, Anthropology 1**, or consent of the instructor.

11. Introduction to Social Research. Spring 1985. MR. McEWEN.

Provides firsthand experience with the specific procedures through which social science knowledge is developed. Emphasizes the interaction between theory and research, and examines the ethics of social research and the uses and abuses of research in policy making. Reading and methodological analysis of a variety of case studies from the sociological and anthropological literature. Field and laboratory exercises that include observation, interviewing, use of available data (e.g., historical documents, statistical archives, computerized data banks, cultural artifacts), sampling, coding, use of computer, elementary data

analysis and interpretation. Lectures, laboratory sessions, small-group conferences.

Prerequisite: **Sociology 1, Anthropology 1**, or consent of the instructor.

13. Social Stratification. Fall 1984. MR. ROSSIDES.

A critical examination of representative theories of inequality which opens with a review of the basic questions and concepts in social stratification, and then develops case studies of three types of social inequality: caste (India, South Africa), estate (feudal Christendom, imperial China), and class (USSR). The heart of the course is an extended analysis of the American class system to determine sources of stability and conflict, and to identify legitimate and illegitimate forms of inequality. Considerable attention is given to theories of imperialism and to determining the United States' role in the international system of stratification. The final theme examines the theory which purports to see some form of postindustrial society emerging in the West.

Prerequisite: **Sociology 1, Anthropology 1**, or consent of the instructor.

14. Science, Technology, and Society. Every spring. MS. BELL.

Considers the social and intellectual origins of scientific knowledge and technological innovation and their impact on society from different theoretical perspectives. Identifies the social structure and dynamics of science as an institution and examines the relationship between the institution of science and the content of scientific knowledge. Explores the role of science and scientific knowledge in technological innovation. Examines the progress and problems associated with scientific and technological changes such as the space race in the 1950s and 1960s, nuclear power, and the production and distribution of pesticides and other hazardous substances.

Prerequisite: **Sociology 1, Anthropology 1**, or consent of the instructor.

15. Criminology and Criminal Justice. Spring 1985. MR. McEWEN.

Focuses on crime and corrections in the United States with some cross-national comparisons. First examines the problematic character of the definition of "crime." Next explores empirical research on the character, distribution, and correlates of criminal behavior and interprets this research in the light of social structural, cultural, and social psychological theories of crime causation. Examines implications of nature and causes of crime for law enforcement and the administration of justice. Finally, surveys the varied ways in which prisons and correctional programs are organized and assesses research about their effectiveness.

Prerequisite: **Sociology 1, Anthropology 1**, or consent of the instructor.

16. Mass Communications. Spring 1985. MR. HAYES.

An examination of the changing role of mass media and telecommunications in the modern world. The histories of various media are related to social processes such as changing economic and class structures, the development of the state, and the spread of literacy and education. Topics studied include the social organization of the media, patterns of ownership and control, style and contents, political regulation and censorship, the impact of the media on various audiences, and the social consequences of the current electronification of the media. Different theoretical perspectives on the subject are compared and critiqued.

Requirements: **Sociology 1, Anthropology 1**, or consent of the instructor.

17. World Population. Fall 1984. MR. HAYES.

Analysis of the components of population composition and dynamics. Both the causes and consequences of population changes will be examined. Attention given to such issues as birth control and women's liberation, zero population growth, population growth and economic development, world trends in life expectancy, labor force changes, the demographic transition, national and international migration, and changing age structure. Special consideration given to the relation between population dynamics and public policy decisions (e.g., day care, mandatory retirement).

Prerequisite: **Sociology 1, Anthropology 1**, or consent of the instructor.

18. Sociology of Law. Fall 1984. MR. McEWEN.

An analysis of the development and function of law and legal systems in preindustrial and industrial societies. Examination of the relationships between law and social change, law and social inequality, and law and social control. Special attention is paid to social influences on the operation of legal systems and the resultant gaps between legal ideals and the "law in action."

Prerequisite: **Sociology 1, Anthropology 1**, or any Level A course in government.

19. Sociology of Sex Roles. Fall 1985. MS. FLOGE.

Various theoretical perspectives, including role theory, are used to study sex roles and their implications for society and individuals. The extent and possible causes (including biological, cultural, social, and economic) of sexual differences in behavior are examined. Topics include historical changes in sex roles as well as cultural and national differences. Design and implementation of a research project addressing a contemporary sex roles issue.

Prerequisite: **Sociology 1, Anthropology 1**, or consent of the instructor.

20. Collective Behavior. Fall 1985. MR. McEWEN.

Description, analysis, and explanation of the nature of recurrent social phenomena such as rumors, crowds, riots, audiences, panics, disasters, publics, fads, revolutions, and reform movements. Analysis of the responses of social control agencies to instances of collective behavior and of the role of collective behavior in social change.

Prerequisite: Two courses in the department or in psychology or consent of the instructor.

Anthropology

3. Social Anthropology. Spring 1985 and 1987. MR. KERTZER.

An examination of the methods and perspectives of social anthropology.

Prerequisite: **Anthropology 1**.

†5. The Black Aesthetic. Spring 1985. MS. BOLLES.

An examination of the artistic expressions of black America in the fields of dance and the visual arts. Focus on past and contemporary black artists, the social and aesthetic reasons for their work, and their contributions to art and society. African and Caribbean materials serve as points for comparison in the African diaspora tradition. Topics include traditional Afro-American arts and crafts, painting, sculpture, graffiti, and other visual media, as well as popular and classical dance.

Prerequisite: Two courses in **Anthropology**, **Sociology**, or **Afro-American Studies** or consent of instructor.

†6. A Cross-Cultural Perspective on Families. Fall 1985. MS. BOLLES.

A cross-cultural view of family types and of household organization among traditional and contemporary societies. The focus will be on how families and kin groups are organized at different points in time, under varying social, cultural, and economic conditions. Contemporary issues affecting families, such as urbanization, suburbanization, labor force participation, and migration, will be examined.

Prerequisite: **Sociology 1**, **Anthropology 1**, or consent of the instructor.

†7. Ritual and Myth. Fall 1985. MR. KERTZER.

Designed to provide a social scientific perspective in the study of religion. Various modes of analysis are considered, including evolutionism, functionalism, symbolic structuralism, psychoanalysis, cultural ecology, and Marxism. A wide range of religious phenomena from diverse societies is examined, including magic, sorcery, witchcraft, shamanism, revitalization movements, cults, and civil religion. Emphasis is on the place of ritual and myth in the larger social context.

Prerequisite: **Anthropology 1**, **Sociology 1**, or consent of the instructor.

†9. **Politics, Culture, and Society.** Fall 1984 and 1986. MR. KERTZER.

The cross-cultural study of political processes, ranging from nomadic bands to nation-states. Issues examined include: How egalitarian are nonstate political systems? How is social order maintained in societies lacking centralized government? How is warfare waged? How are inequalities of political power within a society legitimized? What is the role of symbolism in political legitimation and in revolution? What social processes are involved in attracting and mobilizing political support?

Prerequisite: **Anthropology 1, Sociology 1**, or consent of the instructor.

†12. **Anthropology of Development.** Spring 1986. MS. BOLLES.

Anthropological perspectives on the processes of development, underdevelopment, and the influences of the international capitalist system. Theories of social change are examined, with special reference to rural-urban migration, class, race, and gender. Ethnography and case studies of peoples of African descent, Latin America, Africa, and Asia are utilized. The anthropological study of development utilizes a combined insider-outsider perspective in assessing the impact of large-scale development policy on household-level and community-level activities. In the outsider role, the ethnographer benefits from the large comparative base afforded by anthropological inquiry, providing a more global perspective.

Prerequisite: Two courses in the department or in economics or consent of the instructor.

14. **Women in American Society: Implications of Race, Ethnicity, and Class.** Fall 1984. MS. BOLLES.

See *Afro-American Studies 2*, page 89.

†19. **North American Indians.** Spring 1986. MR. KERTZER.

An overview and analysis of American Indian societies from pre-Columbian times to the present. Topics include the political, economic, family, and religious organization of native American societies; the impact of European expansion on Indian societies; and the current situation—both on and off reservation—of North American Indians.

Prerequisite: **Anthropology 1, Sociology 1**, or consent of the instructor.

Level C Courses
Sociology

31. **Advanced Seminar: Selected Topics.**

Post Industrial Societies. Spring 1985. MR. HAYES.

An exploration of a variety of ways of thinking about the directions modern societies are moving and an examination of the factors that

might influence these directions. Issues include the changing character of work, family, and leisure; the specter of mass unemployment; technology and culture; the role of knowledge and intellectuals; and global inequities. Reading and discussion of works by authors such as Daniel Bell, Jurgen Habermas, and Alvin Toffler. *This course may be repeated for credit with the contents changed.*

Prerequisite: Two courses in the department or consent of the instructor.

200. **Independent Study in Sociology.** Ms. BELL, Ms. FLOGE, MR. McEWEN, AND MR. ROSSIDES.

Anthropology

20. **Anthropological Theory.** Spring 1986. MR. KERTZER.

An examination of the development of various theoretical approaches to the study of culture and society. Anthropology in the United States, Britain, and France are covered from the nineteenth century to the present. Contemporary controversies in anthropological theories are discussed. Among those considered are Morgan, Tylor, Durkheim, Boas, Mauss, Malinowski, Radcliffe-Brown, Margaret Mead, and Levi-Strauss.

Prerequisite: Two courses in anthropology or consent of the instructor.

200. **Independent Study in Anthropology.** Ms. BOLLES AND MR. KERTZER.

Department of Athletics and Physical Education

BOWDOIN BELIEVES that physical education is an important part of the total educational program. The Department of Athletics provides students with opportunities for satisfying experiences in physical activities for the achievement of health and physical fitness. The physical education program includes classes which emphasize instruction in sports activities with carry-over value, intramural athletics, and intercollegiate competition. Students are encouraged to use the athletic facilities to participate in free recreational play.

Intercollegiate Athletics: During the past year, Bowdoin offered intercollegiate competition in the following varsity sports: men's teams were fielded in football, cross-country, basketball, track (winter and spring), skiing, swimming, hockey, wrestling, lacrosse, tennis, baseball, soccer, and squash; women's teams were fielded in cross-country, tennis, field hockey, squash, skiing, swimming, track (winter and spring), soccer, basketball, lacrosse, and softball; coed teams were offered in golf and sailing. Junior varsity or freshman teams are maintained in intercollegiate sports whenever possible.

Physical Education: The instructional program includes a wide variety of activities utilizing campus and off-campus facilities, both natural and man-made. The activities have been selected to provide the Bowdoin community (students, faculty, and staff members) with the opportunity to receive basic instruction in exercises and leisure-time activities. It is hoped that participants will develop these activities into lifelong commitments. The program varies from year to year to meet current interests.

Intramural Athletics: Men's, women's, and coeducational teams at the novice, intermediate, and advanced levels competed in touch football, indoor and outdoor soccer, indoor and outdoor volleyball, golf, bicycling, cross-country running, hockey, basketball, inner-tube water polo, track, wrestling, swimming, and softball. All students and members of the faculty and staff are eligible to participate in the intramural program unless they are playing for a corresponding varsity, junior varsity, or club team.

Outdoor Facilities: The outdoor athletic facilities of the College are excellent. Whittier Field is a tract of five acres that is used for football games and also includes an all-weather track. It has a grandstand with team rooms beneath it. Pickard Field is a tract of over seventy acres that includes a baseball diamond; spacious playing fields for lacrosse, soccer, football, touch foot-

ball, and softball; ten tennis courts; a cross-country ski track; and a field house.

Indoor Facilities: The College possesses indoor facilities that are the equal of its outstanding outdoor facilities. Morrell Gymnasium contains a modern basketball court with seats for about 2,000 persons; 2 visiting team rooms; 11 squash courts; a locker room with 480 lockers; shower facilities; a modern, fully equipped training room; adequate offices for the director of athletics and his staff; and other rooms for physical education purposes. Sargent Gymnasium includes a wrestling room, a weight-training room, a special exercise room, a regulation basketball court, a training room, and locker rooms with 470 lockers. In 1980 the third floor was renovated to become the studio for classes and rehearsals of the Bowdoin Dance Group. The Hyde Athletic Building, which is attached to the Sargent Gymnasium, includes a track, facilities for field events, a banked board track, and an infield area used for baseball and lacrosse practice. Completing the athletic facilities are the Curtis Swimming Pool and the Dayton Arena, which has a refrigerated ice surface 85 by 200 feet and seating accommodations for 2,600 spectators. In 1984 the College announced plans to construct a new field house that will house a 200-meter track, tennis courts, and other facilities to meet intramural and physical education needs.

Hawthorne-Longfellow Library

THE STRENGTH of a college library rests in its collections of books and other library materials and in the ability of its staff to make the library useful to students. Bowdoin's Nathaniel Hawthorne-Henry Wadsworth Longfellow Library is exceptionally strong in its reputation as a college library. Totalling more than 600,000 volumes, its collections have been built up over a period of more than 190 years and include an unusually large proportion of distinguished and valuable volumes. Similarly distinguished has been the roster of librarians of the College, a list that includes John Abbot, Calvin Stowe, Henry Wadsworth Longfellow, and George T. Little. Its present full-time staff includes nine professional librarians and thirteen library assistants.

The first books that belonged to the library—a set of the Count Marsigli's *Danubius Pannonica-Mysicus*, given to the College in 1796 by General Henry Knox (who had been a bookseller in Boston before he achieved fame as George Washington's chief ordnance officer)—are still a part of its collections. In the early decades of the nineteenth century Bowdoin's library, largely because of extensive gifts of books from the Bowdoin family and the Benjamin Vaughan family of Hallowell, Maine, was one of the largest in the nation. It has been maintained as one of the larger college libraries of the country, but its areas of growth are now defined by the curriculum of the College and restrained by the desirability of containing it as a collection to which students can have easy, and almost complete, access. In addition to its 640,000 volumes (a count which includes bound periodicals and newspapers), the library has a collection of approximately 60,000 maps, over 2,000 photographs, and more than 400,000 manuscript items. The current annual rate of acquisition is about 15,000 volumes and the annual expenditure per student is more than \$700.

The Hawthorne-Longfellow Library building was opened in the fall of 1965. The library occupies 60,000 square feet of its floor space and will eventually incorporate the 26,000 square feet presently used for the College's administrative offices. An expansion project completed in 1984 provided more seating, additional open stack shelf space, and climate control for Special Collections. The library has seating for more than 575 readers, of which over 500 are at individual study tables and carrels, and shelving to house all of its collections (with the exception of the rare materials in the Special Collections Suite) on open stacks.

The entrance level of the building contains the portions of the library of most immediate use to its readers: the circulation desk and reserve-book shelves, the card catalog, reference books and bibliographies, current newspapers, current periodicals, periodical indexes, and two large and handsome

reading areas. Study stations are conveniently dispersed on this floor, as they are throughout the building.

The lower level of the library houses Bowdoin's extensive collection of bound periodicals, its collections of microfilm and other microforms, and government documents.

Special features of the second floor are an exhibit area and the President Franklin Pierce Reading Room, informally furnished and giving a broad view through floor-to-ceiling windows. Near this room are more newspapers and magazines for recreational reading. Also on this floor are two suites of ten faculty studies each and small rooms for student typing or group study. The rest of this floor is shelving surrounded by carrels.

More shelving and carrels occupy the principal portion of the third floor. There are nine additional faculty studies on this floor. The eastern end of the third floor is the Special Collections Suite. This includes, in addition to shelf space in a climate-controlled area for Bowdoin's rare books and manuscripts and space for their use, a conference room, and a staff and faculty lounge.

The collections of the library are strong (though inevitably of varying strength) in all areas covered by the curriculum of the College, and a constant effort is maintained to see that representative publications in fields outside the current curriculum are added to the library. There is special strength in documentary publications relating to both British and American history, in the books relating to exploration and the Arctic regions, in books by and about Carlyle, in books and pamphlets about Maine, in materials about the Huguenots, in books and pamphlets on World War I and on the history of much of middle Europe in this century, and in the literary history of pre-twentieth-century France.

The reference collection includes most of the English-language encyclopedias and a good representation in original editions of major foreign encyclopedias—from two editions of the monumental eighteenth-century *Encyclopédie* of Diderot to such modern works as the *Grand Larousse Encyclopédique*, *Der Grosse Brockhaus*, the *Enciclopedia Universal Illustrada Europeo-Americana*, the *Boľ'shala Sovetskāla Entsiklopedia*, and the *Enciclopedia Italiana de Scienze, Lettere ed Arti*. In it also are the principal national bibliographies and other major bibliographical tools. Dispersed in their proper places throughout the collections are such distinguished sets as the *Studies and Documents* of the American Institute of Musicology in Rome, Armando Cortesāo's *Portugaliae Monumenta Cartographia*, the elephant-folio edition of John James Audubon's *Ornithological Biography* (his "Birds of America"), E. S. Curtis's *The North American Indian*, the *Rerum Britannicarum Medii Aevi Scriptores*, Jacques Paul Migne's *Patrologiae* (Latina), the *Scriptores Rerum Germanicum*, Reuben Gold Thwaites's *Early American Travels*, and *The Victoria History of the Counties of England*. Scholarly sets include the publications of the Camden Society, the Early English Text Society, the

Egypt Exploration Society, the Geological Society of America, the Hakluyt Society, the Henry Bradshaw Society, the Huguenot Society of London, the Prince Society, the Royal Historical Society, the Royal Society, the Scottish History Society, the Scottish Text Society, and the Société des Anciens Textes Français. Of comparable, or perhaps even greater, distinction is Bowdoin's collection of more than 90,000 bound volumes of periodical publications.

Special collections in the Hawthorne-Longfellow Library comprise extensive collections of books, manuscripts, and other materials by and about both Hawthorne and Longfellow; books and pamphlets collected by Governor James Bowdoin; the private library of James Bowdoin III; an unusually large collection of late eighteenth- and early nineteenth-century books (particularly in the sciences) collected by Maine's distinguished Vaughan family; books, periodicals, and pamphlets contemporaneous to the French Revolution; the books, papers, and memorabilia of the Abbott family; an unusually fine representation of the items published in the District of Maine and in the state during the first decade of its statehood; and the books printed by the three most distinguished presses in Maine's history: the Mosher Press, the Southworth Press, and the Anthoensen Press.

Also in the Special Collections Suite are the printed items relating to the history of the College and the chief collections of manuscript archives of the College. These include much material on Bowdoin alumni and extend far beyond a narrow definition of official college records. Here also is the library's general collection of manuscripts. Outstanding among the manuscripts are the collections of the papers of Generals O. O. Howard and Charles Howard, of Senator William Pitt Fessenden, and of Professors Parker Cleaveland, Alpheus S. Packard, Henry Johnson, and Stanley Perkins Chase; collections of varying extent of most of Bowdoin's presidents, especially Jesse Appleton, Joshua L. Chamberlain, William DeWitt Hyde, and Kenneth Charles Morton Sills; manuscripts by Kenneth Roberts, Robert Peter Tristram Coffin, Kate Douglas Wiggin, Charles Stephens, Edwin Arlington Robinson, Elijah Kellogg, and such contemporary authors as Vance Bourjaily, John Pullen, and Francis Russell.

The books and manuscripts in Bowdoin's special collections are not treated simply as museum pieces. They are freely open to use by qualified scholars and are extensively used in introducing undergraduates—in their research projects and other independent work—to the variety of research materials regularly used in the scholarly world and which they can expect to use if they continue into university graduate work.

Special collections include also the Bliss collection of books on travel, on French and British architecture, and other fine books (miscellaneous in nature but largely relating to the history of art and architecture) which are housed in the extraordinarily handsome Susan Dwight Bliss Room in Hubbard Hall. These books are additionally distinguished by their fine bindings.

The books in this room and the room itself (with its Renaissance ceiling which once graced a Neapolitan palazzo) were the gift of Miss Bliss in 1945.

During term time the library is open from 8:30 A.M. to midnight Monday through Saturday, and on Sunday from 10:00 A.M. to midnight. When the College is not in session, the library is open 8:30 A.M. to 5:00 P.M. Monday through Friday. Small departmental collections in art, biology, chemistry, mathematics, and music are housed contiguous to the offices of the departments and are available for use on separate schedules of opening.

The operations of the library and the growth of its collections are supported by the general funds of the College and by gifts from alumni and other friends of the library and of the College. The library is annually the recipient of generous gifts of both books and funds for the immediate purchase of books or other library materials. It is always especially desirous of gifts of books, manuscripts, and family records and correspondence relating to the alumni of the College. The income of more than a hundred gifts to the College as endowment is directed to the use of the library.

Museum of Art

AN ART COLLECTION has existed at Bowdoin almost since the inception of the College itself. The earliest acquisition of major importance was a group of 141 old master drawings bequeathed to the College in 1811 by James Bowdoin III. This was the first public collection of its kind in America and contains, among many treasures, a superb landscape by Pieter Brueghel the Elder. James Bowdoin III's collection of old master paintings came to the College two years later, in 1813; the Bowdoin family portraits were given in 1826 at Mrs. Sarah Bowdoin Dearborn's bequest.

Although various parts of the College's art collection were on view during the first half of the nineteenth century, it was not until 1855 that a special gallery devoted to the collection came into being in the College Chapel. This gallery was made possible by a gift from Theophilus Wheeler Walker, a cousin of President Leonard Woods. It was as a memorial to Walker that his two nieces, Harriet Sarah and Mary Sophia Walker, donated funds in 1891 for the erection of the present museum building, designed by Charles Follen McKim of McKim, Mead & White. Four tympana murals of Athens, Rome, Florence, and Venice by John La Farge, Elihu Vedder, Abbott Thayer, and Kenyon Cox, respectively, decorate the museum's Sculpture Hall in the rotunda. In 1984, after careful examination of the layers of paint, the rotunda was repainted in the original McKim colors returning the space to its 1890s splendor.

The museum contains one of the most important collections extant of American colonial and federal portraits, including works by Smibert, Feke, Blackburn, Copley, Stuart, Trumbull, and Sully. Among the five examples by Robert Feke is his greatest work, the full-length likeness of *General Samuel Waldo*, generally regarded as the finest American portrait of the first half of the eighteenth century. The nine Gilbert Stuarts include the so-called official portrait of *Thomas Jefferson*, as well as its pendant, *James Madison*. A complete catalogue of this collection, *Colonial and Federal Portraits at Bowdoin College*, was published by the College, with a matching grant from the Ford Foundation, in 1966.

The College's collection of ancient art contains sculpture, pottery, bronzes, gems, coins, and glass of all phases of the ancient world. The most notable benefactor in this area was Edward Perry Warren, the leading collector of classical antiquities of the first quarter of the twentieth century. Five magnificent ninth-century B.C. Assyrian reliefs from the Palace of Ashurnazirpal II, the gift to the College of Henri Byron Haskell, Medical 1855, are installed in the Museum's Sculpture Hall. *Ancient Art in Bowdoin College*, a descriptive catalogue of these holdings, was published in 1964 by the Harvard University Press.

In recent years the College has been the recipient of a Samuel H. Kress Study Collection of twelve Renaissance paintings; a large collection of medals and plaquettes presented by Amanda, Marquesa Molinari; a fine group of European and American pictures given by John H. Halford, of the Class of 1907, and Mrs. Halford; a collection of Chinese and Korean ceramics given by Governor William Tudor Gardiner and Mrs. Gardiner; and a collection of nineteen paintings and 168 prints by John Sloan bequeathed by George Otis Hamlin.

In the fall of 1964, the College was the recipient of the major portion of a collection of Winslow Homer memorabilia, which until that time had been in the artist's studio at Prout's Neck, the gift of the Homer family. This material, now known as the Homer Collection of the Bowdoin College Museum of Art, includes the artist's first watercolor; a significant group of letters he wrote over a period of many years to various members of his family; and a considerable quantity of photographs of Homer, his family, and of Prout's Neck. Recently, a large collection of woodcuts was purchased to augment these holdings and create an important center for the scholarly study of Homer's graphics.

The museum also contains fine examples of the work of such nineteenth-century and twentieth-century American artists as Eastman Johnson, Thomas Eakins, George Inness, Martin Johnson Heade, William Glackens, Marsden Hartley, Andrew Wyeth, Leonard Baskin, Franz Kline, Arshile Gorky, Jack Tworikov, and Alex Katz.

In 1982, the *Handbook of the Collections*, dedicated to the memory of John H. Halford '07, was published with the assistance of the National Endowment for the Arts, private contributions, and income from endowed funds of the College.

In addition to exhibitions of the permanent collection, the museum every year holds numerous exhibitions of works of art lent by institutions and private collectors throughout the United States. Among the important shows organized by the museum in recent years have been *Ernest Haskell (1876-1925), A Retrospective Exhibition*; *Daniel Putnam Brinley: The Impressionist Years*; *500 Years of Printmaking: Prints and Illustrated Books at Bowdoin College*; *An Ounce of Prevention . . . Care and Conservation of Works of Art*; *All Maine Biennial '79*; *Rock and Crowds: Paintings by Robert Birmelin*; *Paintings from the William H. Lane Foundation: Modern American Masters*; *The Haystack Tradition: Art in the Craft Media*; *Treasures from Near Eastern Looms*; *Winslow Homer Watercolors and Photographs 73-83 John McKee*. From time to time the College lends pictures and objects in the custody of the museum to other institutions in various parts of the country. The museum also sponsors symposia and special lectures. Since 1973 symposia on American furniture, nineteenth-century decorative arts, American Indian

art, nineteenth-century American architects, conservation of art, oriental rugs, and American pewter have been held.

In 1961 the Associates program of the Bowdoin College Museum of Art was formed in order to share more effectively the resources of the museum with the community beyond the College. Students are encouraged to become members at a reduced rate, so that they can take advantage of the Associates' events, including a film series.

The amount of exhibition space in the Walker Art Building was more than doubled following an extensive renovation made possible by gifts to the 175th Anniversary Campaign Program and completed in 1976. Three galleries for exhibiting the museum's permanent collections and a temporary exhibition gallery were added on the lower level, and the previously existing galleries on the ground level were redecorated. One of the new galleries was dedicated in memory of John H. Halford '07, another in memory of John A. and Helen P. Becker.

PEARY-MACMILLAN ARCTIC MUSEUM

The Peary-MacMillan Arctic Museum, which is a part of the Bowdoin College Museum of Art, is a tribute to two famous explorers and Bowdoin alumni—Admirals Robert E. Peary and Donald B. MacMillan.

On April 6, 1909, Peary, a member of the Class of 1877, became the first man to reach the North Pole. MacMillan, a member of the Class of 1898, was his chief assistant on that historic expedition. In 1984, at the seventy-fifth anniversary celebration, the College announced plans for an arctic studies center.

The museum is located on the first floor of Hubbard Hall, for many years the Bowdoin College Library and named for General Thomas Hubbard of the Class of 1857, a generous benefactor of the College and a major financial supporter of Peary's Arctic ventures. It was designed by Ian M. White, currently director of the Fine Arts Museums of San Francisco, who accompanied MacMillan on a trip to the Arctic in 1950. Generous gifts from members of the Class of 1925, together with gifts from George B. Knox of the Class of 1929, a former trustee, and other interested alumni and friends, made the museum a reality in 1967.

Bowdoin's interest and activity in Arctic exploration go back to 1869 when Paul A. Chadbourne, a professor of chemistry and natural history at Bowdoin, with twenty Bowdoin and Williams College students sailed on a voyage which followed nearly the same route the Norsemen must have taken along the coast of Labrador and Greenland as far as Godthaab.

Performing Arts

DRAMA

THE DIVISION OF THEATER ARTS within the Department of English consists of the director of theater and the technical director. The main thrust of its activities is in making possible extensive extracurricular participation in the theater. The student drama group, Masque and Gown, was founded in 1903.

Credit courses in acting and directing are taught by the director of theater. Lighting and stagecraft are taught by the technical director. Each year at least three major productions are produced by the Masque and Gown on the stage of Pickard Theater. For many years one production each season has been a musical. In March 1984, *No, No, Nanette* was presented to capacity houses. One very popular production each year is usually a Shakespeare drama or classical play.

Pickard Theater, the generous gift in 1955 of Frederick William Pickard, LL.D., of the Class of 1894, includes a modern, 600-seat theater with proscenium stage equipped with a hemp and counterweight system for flying scenery and a new electronic lighting control system. In addition, Memorial Hall contains a scene shop and, on the lower floor, a small open-stage theater for experimental work by students.

Membership in the Masque and Gown results from major work on one or minor work on two of the plays produced each season. An executive committee of undergraduates elected by the members consults with the director of theater to determine the program for each year, handles the finances and publicity of the club, and organizes the production work. The Masque and Gown needs—as well as actors, actresses, and playwrights—box-office workers, publicists, directors, designers, builders, painters, electricians, stage hands, and costumers.

One of the most important activities of the club has been its encouragement of playwriting. For over fifty years the Masque and Gown has sponsored an annual student-written one-act play contest, with cash prizes. Winners have later written full-length plays, fifteen of which have been produced on campus and four professionally in New York.

DANCE

The Dance Program is organized by the director of dance and is mainly an extracurricular program designed to provide participation in various forms of dance.

The Bowdoin Dance Group, a student organization for both men and women, began in 1971 with the advent of coeducation.

Classes in dance, without academic credit, vary in response to student interest. The following areas are normally covered.

Modern dance technique: classes aimed at improving movement skills and muscular strength as well as encouraging creative understanding of movement fundamentals—rhythm, force, direction, range, and qualities of movement. Fundamentals of techniques in ballet and jazz are offered when student interest warrants.

Dance composition/choreography: exploration of dance forms, individual and group compositions, motivational factors in dance, movement themes, and dynamics. The approach to learning is through guided experimentation.

Dance performance and production: participation in and responsibility for lecture-demonstrations, workshops, and one major performance. Experience in production management, lighting, sound systems, and in combining dance with other fine arts, such as original music, art, film, and literature.

Dance repertory: development of skills in learning and performing dances, often group works, choreographed by others.

From time to time credit courses in dance history and dance aesthetics have been taught by the director of dance.

MUSIC

Bowdoin offers its students a variety of opportunities in music. Undergraduates participate in the Chamber Choir, College Chorale, Chamber Orchestra, Wind Ensemble, Meddiebempsters, Miscellania, and chamber music ensembles. Student instrumentalists perform in informal repertory sessions and more formal concerts of solo and chamber music.

The Chamber Choir is a mixed ensemble chosen by audition. It concentrates on the performance of serious choral literature from the Renaissance to the present. Its activities include a Christmas carol concert, occasional tours, and on-campus concerts.

The College Chorale, a large mixed chorus of students, faculty members, and townspeople, presents one major choral work with orchestra each semester. Past performances have included Schubert's *Mass in G*, Vaughn Williams's *Fantasy on Christmas Carols*, Mozart's *Vesperae Solennes*, and the Bach *B-minor Mass*.

The Meddiebempsters are a men's double quartet widely known through their concerts at other colleges and European tours. On several occasions they have performed on network radio and television and have appeared in New York's Town Hall. The Miscellania are a women's augmented double quartet founded in 1972. They give joint concerts with the Meddiebempsters and, in 1977, began tours which take them to other New England campuses.

Student instrumental ensembles, appearing in numerous concerts on the campus, have presented music by composers as diverse as Monteverdi, Corelli, Stockhausen, Gabrieli, Mozart, Terry Riley, and John Cage. Faculty performers also participate in these ensembles, offering a wide range of chamber music from past centuries, as well as mixed-media works of the avant-garde, incorporating electronics, film, slides, theater, and dance.

The Chamber Orchestra, composed primarily of students, presents concerts featuring works by a wide spectrum of composers: Bach, Beethoven, Copland, Haydn, Ives, Mozart, Schubert, and Stravinsky. The orchestra also performs with the College Chorale.

Contemporary music plays an important role in Bowdoin's musical life. Student composers may prepare performances of their own works in special concerts, using the services of student, faculty, and visiting instrumentalists. Many visiting composers appear on campus, including Elliott Carter, Milton Babbitt, Virgil Thomson, George Crumb, William Albright, Morton Subotnick, and Ross Lee Finney. Bowdoin operates an electronic music studio with two synthesizers, tape decks, and mixing and editing facilities, used by students in the electronic music course and for independent study projects.

Bowdoin is also concerned with music composed before 1750 and has a fine collection of early instruments for student performance. Included are a number of recorders, krummhorns, cornetti, shawms, and rauschpfiefs. The collection also includes a single-manual Challis harpsichord and a dual-manual Broekman harpsichord built expressly for Bowdoin. Early music is stressed in the department's choral activities as well.

Bowdoin has three organs on campus. There is a 1927 Austin organ in the Chapel, the gift of Cyrus H. K. Curtis; an Allen electronic organ, gift of the Class of 1909, in Pickard Theater; and a 1975 tracker action Jeremy Cooper organ, gift of Chester William Cooke III '57, in the Gibson Hall recital room.

When an artist is invited to perform at Bowdoin, his visit often includes discussions with small groups of students, appearances in classes, and the reading of student compositions. The Curtis-Zimbalist Concert Series, established in 1964 and the principal program through which musicians are invited to perform at Bowdoin, has included the Wesleyan University Gamelan, the Elizabethan Dance Ensemble, the Chinese Music Ensemble of New York, Joan Morris and William Bolcom, the Emmanuel Wind Quartet, the Apple Hill Chamber Players, and the Lydian String Quartet.

Professional teachers are available to give instruction in voice, piano, and other instruments to those students who wish to continue their study of applied music. All students of applied music are also expected to participate in ensembles. The College provides practice rooms without charge. Instrumental and music lockers are available in Gibson Hall for a small fee.

The Bowdoin College Summer School of Music offers intensive training to talented young instrumentalists from all parts of the country. The Aeolian

Chamber Players, in residence, together with the rest of the faculty of the summer school, present recitals during the summer. In addition, the players have given the world premieres of works commissioned by Bowdoin at Contemporary Music Festivals. Several of these works are published by the Bowdoin College Music Press, whose catalogue lists more than twenty works.

The Summer School of Music was founded in 1965 to give serious music students and advanced young instrumentalists an opportunity to develop as performers and musicians through a concentrated program of instrumental and chamber music lessons.

During the summer of 1984, enrollment was over 100 students. Instruction was offered in violin, viola, 'cello, flute, clarinet, piano, voice, and chamber music. Students were given the opportunity to perform in public at weekly recitals.

Student Life and Activities

Bowdoin provides for its students a campus life which combines traditional features of the liberal arts college with modern facilities and programs that enrich the experience of undergraduate life. The curriculum offers formal instruction in those subjects appropriate to the development of educated and enlightened citizens. Within this framework students are encouraged, and are permitted sufficient flexibility, to develop their talents and capacities for leadership. Along with the library, laboratories, art museum, visual arts center, concert and lecture halls, social center, health center, and athletic facilities, continuing attention is given to the less tangible—but more important—intellectual resources of the College. Art shows, lectures, concerts, motion pictures, and legitimate dramatic productions are all planned to provide stimulating experiences which will enhance the student's everyday work within the formal curriculum.

Honor System: A student-initiated proposal, it places complete responsibility upon the individual student for integrity in all academic work, including the use of the library. During registration, each student signs a pledge signifying that he or she understands and agrees to abide by the Bowdoin College Honor System. In so doing, the student is pledging neither to give nor to receive unacknowledged aid in any academic undertaking. Further, the student pledges, in the event that he or she witnesses a violation of the Honor System, to "take such action as he believes is consistent with his own sense of honor." Responsibility for instructing students about their obligations under the Honor System resides with the Student Judiciary Board, which also conducts hearings and recommends action in the event of a reported violation. The constitution of the Honor System and other explanatory information are published in the Bowdoin College Student Handbook.

Board members for 1984-1985 are: James M. Long '85, *Chairman*; Michael F. Buckley '86, Margaret A. Butler '86, Marybeth Fennell '85, Richard J. Ganong, Jr. '86, Andrew L. Meyer '85, and Peter G. Savramis '85.

Social Code: A Bowdoin College Social Code developed by the cooperative efforts of students and faculty members governs undergraduate behavior on the campus. Each student is required to subscribe to the Social Code at registration just as he or she accepts the Honor Code.

Primary responsibility is placed upon each student for the conduct of his or her life. However, the college environment inevitably demands social responsibility from every student. The introduction to the code states: "The success of the Social Code requires the active commitment of all members of the community to the principles on which life at Bowdoin is based."

The responsibility to create a harmonious community among students with different backgrounds and conflicting private views of morality is given, in the first place, to the students. When conflicts arise between students, the code suggests that they be settled on the local level where they originate. Persistent and serious violations of this Social Code may be brought to the attention of the Dean of Students and eventually to the Student Judiciary Board for action.

Living and Dining Accommodations: The College provides living and dining accommodations for its students. Entering freshmen live in housing owned by the College. Those electing to join coeducational fraternities will, after the first few days, normally take their meals at the fraternity house; others dine at the Moulton Union or Wentworth Hall. Students who request and accept room accommodations in the fall are obligated to pay a full year's rent for those accommodations. Further, students who live in campus dormitories or fraternities are required to hold a regular board bill with the Centralized Dining Service. Students living in College apartments are not required to take a regular board bill. The fraternity chapter houses furnish dining accommodations for their members and living accommodations for a large proportion of the sophomore and junior classes (the final arrangements for living quarters being contingent upon the size of enrollment and other factors).

Moulton Union: The Union is the community center of the College.

The main lounge, with its pleasant fireplace, is arranged for informal use as well as college gatherings: lectures, recitals, receptions, and banquets. The Lancaster Lounge, in the wing opposite the main lounge, and a smaller lounge add flexibility to the main floor area. Also on this floor are the scheduling and information desk and the campus telephone switchboard.

A large, self-service bookstore, which features a broad selection of paperbacks, is located in the southeast corner on the main floor and supplies textbooks and sundries to members of the College.

Extracurricular activities such as the Student Executive Board, the Camera Club, and WBOR have offices in the Union. The Career Services Office is on the second floor of the building.

On the lower floor, food service is provided in a variety of dining rooms, one of which serves as a banquet room for groups of less than one hundred. The Bear Necessity, opened in 1981, provides an informal gathering place for members of the College community. A light supper menu and entertainment are available. Also on this floor are a game room, a darkroom, and a mail room.

The formulation of policies and the planning of the many-sided program of activities are the responsibility of the assistant dean of students and the Student Union Committee. By sponsoring concerts, art exhibitions, tourna-

ments, and other entertainments, the committee contributes to the social life of the entire college community.

Coeducational Fraternities: Approximately one-half of all Bowdoin students join one of the coeducational fraternities. Membership is open to all undergraduates. One-third of the upperclass fraternity members live in the fraternity houses, which are located adjacent to the campus and are owned and operated by alumni house corporations. Most other members live in college housing, but often take meals in their fraternity dining rooms during the freshman, sophomore, and junior years. All Bowdoin social and safety regulations apply to fraternity members.

Fraternities are an important part of the undergraduate life of the College, particularly for members, providing a focus for social activities. In addition, fraternity members enjoy the many benefits derived from the sharing of educational concerns and daily living experiences within the fraternities. Membership affords students an opportunity to assume significant responsibilities in self-governance within the fraternity organizations, and offers exposure to the history and traditions of the fraternities and the College.

Independents: Half of the students at Bowdoin choose not to join fraternities. Instead they participate in a wide variety of student organizations. They may take their meals at the Moulton Union or Wentworth Hall.

Student Executive Board: Student social life at Bowdoin, the running of student organizations, and the gathering of student opinion to advise faculty and administrators on issues of general campus concern are entrusted to the students themselves. Undergraduate self-government is vested in the Student Executive Board, which makes recommendations about student affairs to the student body and to the faculty. In addition, the Student Executive Board participates in the broader governance of the campus through representatives chosen by the board to be members of the various committees of the faculty and the Governing Boards.

Student Judiciary Board: The Student Judiciary Board is responsible for introducing new students to the Honor System and Social Code. It also sits in judgment on those accused of violations of the Honor System or breaches of the Social Code. Its decisions take the form of recommendations to the Dean of Students. The board comprises three seniors and two juniors, all selected by the Student Judiciary Board with the approval of the Student Executive Board.

Student Representatives to Committees of the Faculty and Governing Boards: Most of the committees of the faculty and Governing Boards have invited student representatives to be voting members and to sit with them in their deliberations. This representation has facilitated the exchange of information and points of view between the various constituencies of the College.

Board of Proctors: The maintenance of order in the dormitories, the general comfort of dormitory residents, and informal peer counseling are the responsibility of the proctors, who are appointed by the Dean of Students.

Organizations

Afro-American Society: The Afro-American Society was formed by students in 1968 to make black students proud and aware of their heritage and to convey to the white community an understanding of that heritage by emphasizing black contributions to culture. The society is instrumental in the recruitment of black students and assists black freshmen in making adjustment to college life. The activities of the society are concentrated in the John Brown Russwurm Afro-American Center and are open to all members of the college community.

Bowdoin Film Society: The BFS sponsors films throughout the school year. Box office proceeds are used to buy films for the permanent collection and to finance some student film work. The society makes annual awards to Bowdoin students in the categories of best editing, best cinematography, best comedy, best documentary, and best film, for films produced as part of English 13.

Bowdoin Gay-Straight Alliance: The alliance, chartered in 1980, meets to discuss issues of sexual and affectional freedom and presents films and lectures.

Bowdoin Women's Association: The BWA sponsors lectures on topics of interest to the entire college community as well as informal gatherings where Bowdoin women can get to know one another and discuss their Bowdoin experiences. The Women's Resource Center, which functions under the aegis of the BWA, is located at 24 College Street.

Bugle: The *Bugle* is the college yearbook.

Cheerleaders: A wildly exuberant group of men and women who help lead the Polar Bears to victory.

Foreign Student Association: The association sponsors intercultural events and helps Bowdoin foreign students adjust to American college life.

Interfraternity Council: The presidents of the fraternities meet regularly to discuss common problems and to review ways in which fraternities at Bowdoin may contribute more effectively to undergraduate life.

Kamerling Society: Named in honor of Samuel E. Kamerling, Charles Weston Pickard Professor of Chemistry Emeritus, the society is Bowdoin's

student chapter affiliated with the American Chemical Society. The society sponsors lectures, films, and seminars for the college community.

Masque and Gown: This college dramatic organization has for more than eighty seasons provided undergraduates with opportunities to give practical expression to their interest in the theater. The Executive Committee shall continue its policy of producing full-length and one-act plays and of sponsoring the annual student-written one-act play contest; the committee also uses various experimental production techniques. Under the direction of the director of theater and housed in Pickard Theater, the Masque and Gown offers many opportunities for those interested in playwriting, scene design and construction, acting, and business management and publicity.

Music: Music activities include the Meddiebempsters, a men's augmented double quartet; the Miscellania, a women's augmented double quartet; the Chamber Choir; the Chorale; the Bowdoin Marching Band; and the Chamber Orchestra.

Orient: The *Bowdoin Orient*, the college newspaper, is now in its 111th year of continuous publication. There are opportunities for freshmen as reporters and for newcomers at the news desk, and advancement on the staff is rapid for those with a flair for journalism. Students interested in the business management of the newspaper will also find opportunities for work and advancement.

Outing Club: Organized in 1948, the Outing Club sponsors a program of outdoor activities including rock and mountain climbing, cycling, canoeing, and cross-country skiing.

Quill: The *Quill* is the college literary publication and is normally published once each semester. Each issue contains articles in all fields of student literary interest: short stories, essays, poems, and reviews. Contributions are welcomed from all members of the College.

Radio: In WBOR, "Bowdoin-on-Radio," the College has a well-equipped FM radio station as the result of a gift from the Class of 1924. Situated on the second floor of the Moulton Union, both studios and the control room are sealed against disturbances of sound with acoustical tiling and sound-lock doors. The student-operated station broadcasts daily when the College is in session. Positions as announcers, engineers, newscasters, and sportscasters are numerous and open to any student who has an FCC Third Class Permit with broadcast endorsement.

Religious Life: Religious activities at Bowdoin are organized by the students. In recent years the Bowdoin Christian Fellowship, the Bowdoin Christian Science Organization, the Bowdoin Jewish Organization, and the New-

man Association have been active. Each has planned activities appropriate to its membership.

Thymes: The *Bowdoin Thymes* is the daily newspaper/calendar of the college. It is a publication of the Dean of the College and employs two undergraduates as coeditors. Each weekday the *Thymes* is printed and delivered to dormitories, fraternities, and other buildings on campus.

Voluntary Service Programs: A wide range of social service activities are undertaken by students. Their voluntary nature is their essential characteristic. Students participating in them receive no compensation or academic credit. Each of the major programs is coordinated by a student leader, and the smaller or individual activities are organized by the voluntary service programs coordinator.

Currently these activities include the Big Brother-Big Sister program, which provides companionship and activities for children of elementary and junior high school age; a program of assistance to area retarded citizens; programs which seek to help the elderly and infirm in the region; the Regional Hospital Program for those considering careers in medicine; a school tutoring program; Bowdoin Undergraduate Teachers, which is of particular interest to those interested in a teaching career since it provides opportunities for direct participation in local school classrooms; the Bath Children's Home Program, in which students offer friendship and academic assistance to youngsters living in a group home; and Project BASE (Bowdoin and Sweetser exchange), which offers an opportunity to work with emotionally disturbed children at a residential school.

Career Services

THE Office of Career Services recognizes that the selection of a career path today is a complex undertaking. Students are encouraged to begin the career planning process early in their college years.

A staff of four is available for individual counseling, and a wide range of programs and services are offered to all undergraduates. Workshops and presentations throughout the academic year offer assistance in identifying skills, selecting a major, locating internship and summer job prospects, and refining job hunting techniques. Each year, more than forty companies and thirty-five graduate schools participate in on-campus recruiting programs.

Alumni and parents are regularly involved both on- and off-campus in special programs designed to enhance students' understanding of the job market and to broaden their awareness of career options. In addition, a computerized network allows the staff to refer students to alumni and parents in locations and professions of particular interest to those individuals.

The office continually updates its two resource centers which house materials on specific careers, companies and organizations, graduate schools, and internship opportunities. A weekly newsletter publicizes all career service events and programs in addition to job and internship openings.

Lectureships

THE REGULAR INSTRUCTION of the College is supplemented each year by ten or twelve major lectures, in addition to lectures, panel discussions, and other presentations sponsored by the various departments of study and undergraduate organizations.

John Warren Achorn Lectureship: Established by Mrs. John Warren Achorn as a memorial to her husband, a member of the Class of 1879. The income is used for lectures on birds and bird life. (1928)

Charles F. Adams Lectureship: Established by the bequest of Charles F. Adams of the Class of 1912, it is used to support a lectureship in political science and education. (1978)

Charles R. Bennett Memorial Fund: Given by Mrs. Mary D. Bennett in memory of her husband, a member of the Class of 1907. The income is made available to the Department of Mathematics preferably for the purpose of meeting the expenses of a visiting mathematics lecturer. (1962)

Chemistry Lecture Fund: By vote of the Governing Boards, the balance of a fund given for Department of Chemistry lectures is used for special lectures in chemistry. (1939)

Dan E. Christie Mathematics Lecture Fund: Established by family, friends, colleagues, and former students in memory of Dan E. Christie, of the Class of 1937, a member of the faculty for thirty-three years and Wing Professor of Mathematics from 1965 until his death in 1975. The income from the fund is used to sponsor lectures under the auspices of the Department of Mathematics. (1976)

Annie Talbot Cole Lectureship: Given by Mrs. Calista S. Mayhew in memory of her niece, Mrs. Samuel Valentine Cole. According to the terms of the gift, this lectureship was established to contribute "to the ennoblement and enrichment of life by standing for the idea that life is a glad opportunity. It shall, therefore, exhibit and endeavor to make attractive the highest ideals of character and conduct, and also, insofar as possible, foster an appreciation of the beautiful as revealed through nature, poetry, music, and the fine arts." (1906)

The Elliott Oceanographic Fund: Established by the Edward Elliott Foundation and members of the Elliott family in memory of Edward L. Elliott, a practicing geologist and mining engineer who expressed a lifelong interest in science and the sea. The fund is to be used in support of oceanographic edu-

cation, in its widest definition, for Bowdoin students. It is expected that at least part of the fund will be used to support the Elliott Lectures in Oceanography, which were inaugurated in 1971. (1973)

Cecil T. Holmes Mathematics Lecture Fund: Established by friends, colleagues, and former students, it honors Cecil T. Holmes, Ph.D., a member of the faculty for thirty-nine years and Wing Professor of Mathematics Emeritus since his retirement in 1964. It is used to provide lectures under the sponsorship of the Department of Mathematics. (1977)

Mayhew Lecture Fund: This lectureship was founded by Mrs. Calista S. Mayhew. The income from the bequest is used to provide lectures on bird life and its effect on forestry. (1923)

Charles Weston Pickard Lecture Fund: Given by John Coleman Pickard, of the Class of 1922, in memory of his grandfather, a member of the Class of 1857. Beginning with the academic year 1963-1964, and every four years thereafter, the income is used to provide a lecture in the field of journalism in its broadest sense. "By journalism is meant lines of communication with the public, whether through newspapers, radio, television, or other recognized media." (1961)

John Brown Russwurm Distinguished Lecture Series: Established to honor the memory of Bowdoin's first black graduate, John Brown Russwurm, A.B. 1826, A.M. 1829, the goal of the series is to inform the Bowdoin and neighboring communities about the legacy and status of black people in America. (1977)

Kenneth V. Santagata Memorial Lecture Fund: Established by family and friends of Kenneth V. Santagata, Class of 1973, to carry out his lifetime objective. It is used to provide at least one lecture each term, rotating in the Arts, Humanities, and Social Sciences, with lecturers to be recognized authorities in their respective fields, to present new, novel, or non-conventional approaches to the designated topic in the specific category. (1982)

Edith Lansing Koon Sills Lecture Fund: Established by the Society of Bowdoin Women to honor Mrs. Kenneth C. M. Sills, the wife of a former president of Bowdoin College. The fund is to be used to support lectures at the College. (1961)

The Harry Spindel Memorial Lectureship: Established by the gift of Rosalyn Spindel Bernstein and Sumner Thurman Bernstein in memory of her father, Harry Spindel, as a lasting testimony to his lifelong devotion to Jewish learning. The income of the fund is to be used to support annual lectures in Judaic studies or contemporary Jewish affairs. (1977)

The Jasper Jacob Stahl Lectureship in the Humanities: Established by the bequest of Jasper Jacob Stahl, of the Class of 1909, the annual income from this fund is "to support a series of lectures to be delivered annually at the College by some distinguished scholarly and gifted interpreter of the Art, Life, Letters, Philosophy, or Culture, in the broadest sense, of the Ancient Hebraic World, or of the Ancient Greek World or of the Roman World, or of the Renaissance in Italy and Europe, or of the Age of Elizabeth I in England, or that of Louis XIV and the Enlightenment in France, or of the era of Goethe in Germany." (1970)

Tallman Lecture Fund: This fund was established with a gift of \$100,000 by Frank G. Tallman, A.M. (Bowdoin, 1935), as a memorial to the Bowdoin members of his family. The income is to be expended annually upon a series of lectures to be delivered by persons selected by the faculty. In addition to offering a course for undergraduates, the Visiting Professor on the Tallman Foundation gives public lectures on the subject of special interest. (1928)

Prizes and Distinctions

THE BOWDOIN PRIZE: A fund, now amounting to \$60,090, established as a memorial to William John Curtis, LL.D., of the Class of 1875, by his wife and children. The prize, four-fifths of the total income not to exceed \$10,000, is to be awarded "once in each five years to the graduate or former member of the College, or member of its faculty at the time of the award, who shall have made during the period the most distinctive contribution in any field of human endeavor. The prize shall only be awarded to one who shall, in the judgment of the committee of award, be recognized as having won national and not merely local distinction, or who, in the judgment of the committee, is fairly entitled to be so recognized." (1928)

The first award was made in 1933 and the most recent in 1978. Recipient of the award in 1978 was Asa S. Knowles, LL.D., Litt.D., Sc.D., D.B.A., Sc.D. in Bus. Ed., D.Ped., L.H.D., Sc.D. in Ed., of the Class of 1930.

UNDERGRADUATE PRIZES

Prizes in General Scholarship

Brooks-Nixon Prize Fund: A fund of \$8,721 established by Percy Willis Brooks, of the Class of 1890, and Mary Marshall Brooks. The annual income is awarded each year as a prize to the best Bowdoin candidate for selection as a Rhodes scholar. (1975)

Brown Memorial Scholarships: A fund for the support of four scholarships in Bowdoin College given by the Honorable J. B. Brown, of Portland, in memory of his son, James Olcott Brown, A.M., of the Class of 1856. According to the provisions of this foundation, there will be paid annually the income of \$1,000 to the best scholar in each undergraduate class who shall have graduated at the high school in Portland after having been a member thereof not less than one year. The awards are made by the City of Portland upon recommendation of the College. (1865)

Almon Goodwin Prize Fund: This fund of \$2,085 was established by Mrs. Maud Wilder Goodwin in memory of her husband, Almon Goodwin, of the Class of 1862. The annual income is awarded to a member of Phi Beta Kappa chosen by vote of the Board of Trustees of the College at the end of the recipient's junior year. (1906)

George Wood McArthur Prize: A fund of \$3,506 bequeathed by Almira L. McArthur, of Saco, in memory of her husband, George Wood McArthur, of the Class of 1893. The annual income is awarded as a prize to that member

of the graduating class who, coming to Bowdoin as the recipient of a pre-matriculation scholarship, shall have attained the highest academic standing among such recipients within the class. (1950)

Leonard A. Pierce Memorial Prize: A prize, established by friends and associates, consisting of the income of a fund of \$33,511. It is awarded annually to that member of the graduating class who is continuing his or her education in an accredited law school and who attained the highest scholastic average during his or her years in college. It is paid to the recipient upon enrollment in law school. (1960)

Departmental Prizes

Art History Junior-Year Prize: A prize funded annually by a donor wishing to remain anonymous and awarded to a student judged by the Department of Art to have achieved the highest distinction in the major program in art history and criticism at the end of the junior year. (1979)

Art History Senior-Year Prize: A prize consisting of a portion of the income of a fund of \$33,249 established by a donor wishing to remain anonymous and awarded to a graduating senior judged by the Department of Art to have achieved the highest distinction in the major in art history and criticism. (1982)

Philip C. Bradley Spanish Prize: A prize from the annual income of a fund of \$2,211 established by classmates and friends in memory of Philip C. Bradley 1966 is awarded to outstanding students in Spanish language and literature. (1982)

Sue Winchell Burnett Music Prize: A prize consisting of the annual income of a fund of \$1,921 established by Mrs. Rebecca P. Bradley in memory of Mrs. Sue Winchell Burnett. It is awarded upon recommendation of the Department of Music to that member of the senior class who has majored in music and has made the most significant contribution to music while a student at Bowdoin. If two students make an equally significant contribution, the prize will be divided equally between them. (1963)

Class of 1875 Prize in American History: A prize consisting of the annual income of a fund of \$7,927 established by William John Curtis, LL.D., of the Class of 1875, is awarded to the student who writes the best essay and passes the best examination on some assigned subject in American history. (1901)

Copeland-Gross Biology Prize: A prize from a fund of \$568 named in honor of two former Josiah Little Professors of Natural Science, Manton Copeland and Alfred Otto Gross, Sc.D., is awarded to that graduating senior who has best exemplified the idea of a liberal education during the major program in biology. (1972)

Philip W. Cummings Philosophy Prize: A prize of the annual income of a fund of \$1,721 is awarded to the most deserving student in the Department of Philosophy. The prize was given by Gerard L. Dube of the Class of 1955 in memory of his friend and classmate. (1984)

Hannibal Hamlin Emery Latin Prize: A prize consisting of the annual income of a fund of \$2,085 is awarded to a member of the junior or senior class for proficiency in Latin. (1922)

Fessenden Prize in Government: A prize of \$50, the gift of Richard Dale, of the Class of 1954, is given by the Department of Government to that graduating senior who as a government major has made the greatest improvement in studies in government, who has been accepted for admission into either law or graduate school or has been accepted for employment in one of certain federal services, and who is a United States citizen. (1964)

Goodwin French Prize: A prize consisting of the annual income of a fund of \$1,140 given by the Reverend Daniel Raynes Goodwin, D.D., of the Class of 1832, is awarded to the best scholar in French. (1890)

Nathan Goold Prize: A prize consisting of the annual income of a fund of \$4,517 established by Abba Goold Woolson, of Portland, in memory of her grandfather. It is awarded to that member of the Senior Class who has, throughout the college course, attained the highest standing in Greek and Latin studies. (1922)

Edwin Herbert Hall Physics Prize: A prize, named in honor of Edwin Herbert Hall, LL.D., of the Class of 1875, the discoverer of the Hall Effect, is awarded each year to the best sophomore scholar in the field of physics. The prize consists of the income of a fund amounting to \$3,509. (1953)

Edward Sanford Hammond Mathematics Prize: The income of a fund amounting to \$4,726 is used to purchase a book that is awarded on recommendation of the Department of Mathematics to a graduating senior who is completing a major in mathematics with distinction. Any balance of the income from the fund may be used to purchase books for the department. The prize honors the memory of Edward S. Hammond, for many years Wing Professor of Mathematics, and was established by his former students at the time of his retirement. (1963)

Jefferson Davis Award: A prize consisting of the three-volume *Jefferson Davis* by Hudson Strode and the annual income of a fund of \$10,977 is awarded to the student excelling in constitutional law. (1973)

Sumner Increase Kimball Prize: A prize consisting of the annual income of a fund of \$4,905 established by Sumner Increase Kimball, Sc.D., of the Class

of 1855, is awarded to that member of the senior class who has "shown the most ability and originality in the field of the Natural Sciences." (1923)

Eaton Leith French Prize: The annual income of a fund of \$4,103 awarded to that member of the sophomore or junior class who, by his or her proficiency and scholarship, achieves outstanding results in the study of French literature. The prize was established in 1962 and endowed in 1966 by James M. Fawcett III, of the Class of 1958, to honor Eaton Leith, professor of Romance languages emeritus. (1962)

Anne Bartlett Lewis Memorial Fund: The annual income of a fund of \$3,830 for demonstrations of excellence in art history and creative visual arts by two students enrolled as majors in the Department of Art. The fund was established by her husband, Henry Lewis, and her children, William H. Hannaford, David Hannaford, and Anne D. Hannaford. (1981)

Noel C. Little Prize in Experimental Physics: A prize amounting to the income of a fund of \$678 named in honor of Noel C. Little, Sc.D., of the Class of 1917, professor of physics emeritus, and Josiah Little Professor of Natural Science Emeritus, to be awarded to a graduating senior who has distinguished himself or herself in experimental physics. (1968)

Charles Harold Livingston Honors Prize in French: The annual income of a fund of \$1,951 is awarded to encourage independent scholarship in the form of honors theses in French. The fund was established by former students of Charles Harold Livingston, Longfellow Professor of Romance Languages, upon the occasion of his retirement. (1956)

Donald and Harriet S. Macomber Prize in Biology: A fund of \$7,648 established by Dr. and Mrs. Donald Macomber in appreciation for the many contributions of Bowdoin in the education of members of their family—David H. Macomber '39, Peter B. Macomber '47, Robert A. Zottoli '60, David H. Macomber, Jr. '67, and Steven J. Zottoli '69. The income of the fund is to be awarded annually as a prize to the outstanding student in the Department of Biology. If, in the opinion of the department, in any given year there is no student deemed worthy of this award, the award may be withheld and the income for that year added to the principal of the fund. (1967)

Philip Weston Meserve Fund: A prize consisting of the annual income of a fund of \$1,722 in memory of Professor Philip Weston Meserve, of the Class of 1911, "to be used preferably to stimulate interest in Chemistry." (1941)

James Malcolm Moulton Prize in Biology: The income of a fund of \$800 given by former students and other friends in honor of the George Lincoln Skolfield, Jr., Professor of Biology Emeritus, to provide a book prize to be awarded annually to the outstanding junior majoring in biology, as judged

by scholarship and interest in biology. At the discretion of the Department of Biology, this award may be made to more than one student or to none in a given year. (1984)

Noyes Political Economy Prize: A prize consisting of the annual income of a fund of \$2,085 established by Crosby Stuart Noyes, A.M. (Bowdoin, 1887), is awarded to the best scholar in political economy. (1897)

The Old Broad Bay Prizes in Reading German: The income from a fund of \$1,780 given by Jasper J. Stahl, Litt.D., of the Class of 1909, and by others to be awarded to students who in the judgment of the department have profited especially from their instruction in German. The fund is established as a living memorial to those remembered and unremembered men and women from the valley of the Rhine who in the eighteenth century founded the first German settlement in Maine at Broad Bay, now Waldoboro. (1964)

Pray English Prize: A prize consisting of the annual income of a fund of \$2,256 given by Thomas Jefferson Worcester Pray, M.D., of the Class of 1844, is awarded to the best scholar in English literature and original English composition. (1889)

Sewall Greek Prize: A prize of \$25 from the income of a fund of \$2,729 given by Jotham Bradbury Sewall, S.T.D., of the Class of 1848, formerly professor of Greek in the College, is awarded to the member of the sophomore class who sustains the best examination in Greek. (1879)

Sewall Latin Prize: A prize of \$25 from the income of a fund of \$2,729 given by Professor Sewall is awarded to the member of the sophomore class who sustains the best examination in Latin. (1879)

David Sewall Premium: A prize consisting of the annual income of a fund of \$2,169 is awarded to a member of the freshman class for excellence in English composition. (1795)

Bertram Louis Smith, Jr., Prize: A fund of \$7,114 established from the bequest of Bertram Louis Smith, in memory of his son, a member of the Class of 1903, to encourage excellence of work in English literature. The annual income of this fund is awarded by the department to a member of the junior class who has completed two years' work in English literature. Ordinarily, it is awarded to a student majoring in English, and performance of major work as well as record in courses is taken into consideration. (1925)

Smyth Mathematical Prize: A fund of \$12,211, the gift of Henry Jewett Furber, of the Class of 1861, named by him in honor of Professor William Smyth. A prize of \$300 is given to that student in each sophomore class who obtains the highest grades in mathematics courses during the first two years. The prize is awarded by the faculty of the Department of Mathematics, which

will take into consideration both the number of mathematics courses taken and the level of difficulty of those courses in determining the recipient. The successful candidate receives one-third of the prize at the time the award is made. The remaining two-thirds is paid to him or her in installments at the close of each term during junior and senior years. If a vacancy occurs during those years, the income of the prize goes to the member of the winner's class who has been designated as the alternate recipient by the department. (1876)

Lea Ruth Thumim Biblical Literature Prize: A prize consisting of the annual income of a fund of \$1,505 given by Carl Thumim in memory of his wife, Lea Ruth Thumim, is awarded each year by the Department of Religion to the best scholar in biblical literature. (1959)

Prizes in Debating and Speaking

Edgar Oakes Achorn Prize Fund: The income of a fund of \$2,128 is distributed as prizes to the winning team in an annual debate between the sophomore and freshman classes. If this debate should fail in interest or scholastic benefit, the prizes may, at the discretion of the faculty, be withdrawn, and the income awarded annually as a prize for the best essay by a member of the sophomore or freshman classes on "Chapel Exercises, Their Place at Bowdoin"; or on any other subject germane to the place of religion in a liberal education. (1932)

Bradbury Debating Prize: The annual income of \$3,597 of a fund of \$8,992 given by James Ware Bradbury, LL.D., of the Class of 1825, is awarded for excellence in debating. First team, two-thirds of the income; second team, one-third of the income. (1901)

Hiland Lockwood Fairbanks Prize Fund: This fund of \$4,181 was established by Captain Henry Nathaniel Fairbanks, of Bangor, in memory of his son Hiland Lockwood Fairbanks, of the Class of 1895. Of the annual income one-half is awarded as a single prize for excellence in **English 11** and the remaining one-half, in a two-to-one ratio, is awarded as first and second prizes to the two outstanding students in **English 10**. (1909)

Stanley Plummer Prizes: The annual income of a fund of \$1,851 established by Stanley Plummer, of the Class of 1867, is awarded to the two outstanding students in **English 12**. First and second prizes are awarded in a two-to-one ratio. (1919)

Commencement Prizes

DeAlva Stanwood Alexander Prize: Established by DeAlva Stanwood Alexander, LL.D., of the Class of 1870, this fund furnishes two prizes for excellence in select declamation. (1908)

Classes of 1868 Prize: Contributed by the Class of 1868, this prize is awarded for a written and spoken oration by a member of the senior class. (1868)

Goodwin Commencement Prize: Established by the Reverend Daniel Raynes Goodwin, D.D., of the Class of 1832, the prize is awarded for a written or oral presentation at Commencement. (1882)

Essay Prizes

Philo Sherman Bennett Prize Fund: This fund of \$1,056 was established by William Jennings Bryan from trust funds of the estate of Philo Sherman Bennett, of New Haven, Connecticut. The income is used for a prize for the best essay discussing the principles of free government. Competition is open to juniors and seniors. (1905)

Brown Composition Prizes: Two prizes from the annual income of a fund of \$2,508 established by Philip Greely Brown, A.M., of the Class of 1877, in memory of Philip Henry Brown, Esq., A.M., of the Class of 1851, are offered to members of the senior class for excellence in extemporaneous English composition. (1874)

General R. H. Dunlap Prize: This fund of \$6,407 was established by Katharine Wood Dunlap in memory of her husband, Robert H. Dunlap, Brigadier General, U.S.M.C. The annual income is to be awarded to the student who writes the best essay on the subject of "service." (1970)

Horace Lord Piper Prize: A prize consisting of the income of a fund of \$2,514 established by Sumner Increase Kimball, Sc.D., of the Class of 1855, in memory of Major Horace Lord Piper, of the Class of 1863. It is awarded to that member of the sophomore class who presents the best "original paper on the subject calculated to promote the attainment and maintenance of peace throughout the world, or on some other subject devoted to the welfare of humanity." (1923)

Prizes in Creative Arts

Bowdoin Orient Prizes: Six cash prizes are offered by the Bowdoin Publishing Company and are awarded each spring to those members of the *Bowdoin Orient* staff who have made significant contributions to the *Orient* in the preceding volume. (1948)

Abraham Goldberg Prize: The income from a fund of \$271, from a bequest of Abraham Goldberg, this prize is awarded annually to that member of the senior class who, in the opinion of a faculty committee headed by the director of theater, has shown, in plays presented at the College during the two years

preceding the date of award, the most skill in the art of designing or directing. (1960)

Hawthorne Prize: The income of a fund of \$512 given in memory of Robert Peter Tristram Coffin, Litt.D., of the Class of 1915, Pierce Professor of Literature, and in memory of the original founders of the Hawthorne Prize: Nora Archibald Smith and Kate Douglas Wiggin, Litt.D. It is awarded each year to the author of the best short story. The competition is open to members of the sophomore, junior, and senior classes. (1903)

Masque and Gown Figurine: A figurine, "The Prologue," carved by Gregory Wiggin, is presented annually to the author of the prize-winning play in the One-Act Play Contest, and held by the winner until the following contest. (1937)

Masque and Gown One-Act Play Prizes: Cash prizes are awarded annually for excellence in various Masque and Gown activities, including playwriting, directing, and acting. (1934)

Alice Merrill Mitchell Prize: A prize consisting of the annual income of a fund of \$3,043, given by Wilmot Brookings Mitchell, L.H.D., of the Class of 1890, Edward Little Professor of Rhetoric and Oratory, in memory of his wife, Alice Merrill Mitchell, is awarded annually to that member of the senior class who, in the opinion of a faculty committee headed by the director of theater, has shown, in plays presented at the College during the two years preceding the date of award, the most skill in the art of acting. (1951)

William H. Moody '56 Award: A fund of \$1,884 established in memory of Bill Moody, who for many years was the theater technician and friend of countless students. The award is presented annually, if applicable, to one or more upperclassmen having made outstanding contributions to the theater through technical achievements accomplished in good humor. The award should be an appropriate memento of Bowdoin. (1980)

Poetry Prize: The annual income of a fund of \$511 is given each semester for the best poem on Bowdoin written by an undergraduate. (1926)

George H. Quinby Award: Established in honor of "Pat" Quinby, for thirty-one years director of dramatics at Bowdoin College, by his former students and friends in Masque and Gown, the award is presented annually to one or more freshman members of Masque and Gown who make an outstanding contribution through interest and participation in Masque and Gown productions. The recipients are selected by the director of theater, the theater technician, and the president of Masque and Gown. The award consists of the income from a fund of \$5,698. (1967)

Forbes Rickard, Jr., Poetry Prize: A prize consisting of the annual income of a fund of \$951 given by a group of alumni of the Bowdoin chapter of Alpha Delta Phi Fraternity in memory of Forbes Rickard, Jr., of the Class of 1917, who lost his life in the service of his country, is awarded to the undergraduate writing the best poem. (1919)

Mary B. Sinkinson Short Story Prize: A prize consisting of the annual income of a fund of \$2,758 established by John Hudson Sinkinson, of the Class of 1902, in memory of his wife, Mary Burnett Sinkinson, is awarded each year for the best short story written by a member of the junior or senior class. (1961)

Paul Andrew Walker Prize Fund: Established in honor and memory of Paul Andrew Walker, of the Class of 1931, by his wife, Nathalie L. Walker, forty percent of the income of the fund of \$4,490 is used to honor a member or members of the *Bowdoin Orient* staff whose ability and hard work are deemed worthy by the Award Committee chosen by the Dean of the College. A bronze medal or an appropriate book, with a bookplate designed to honor Paul Andrew Walker, is presented to each recipient. (1982)

Awards for Character and Leadership

Women's Basketball Alumnae Award: A bowl, inscribed with the recipient's name, given to the player who "best exemplifies the spirit of Bowdoin Women's Basketball, combining talent with unselfish play and good sportsmanship." The award is presented by Bowdoin alumnae basketball players. (1983)

Society of Bowdoin Women Athletic Award: An award presented each May to a member of a women's varsity team in recognition of her "effort, cooperation, and sportsmanship." Selection is made by a vote of the Department of Athletics and the Dean of Students. (1978)

Leslie A. Claff Track Trophy: A trophy presented by Leslie A. Claff, of the Class of 1926, to be awarded "at the conclusion of the competitive year to the outstanding performer in track and field athletics who, in the opinion of the Dean, the Director of Athletics, and the Track Coach, has demonstrated outstanding ability accompanied with those qualities of character and sportsmanship consistent with the aim of intercollegiate athletics in its role in higher education." (1961)

Annie L. E. Dane Trophy: Named in memory of the wife of Francis S. Dane, of the Class of 1896, and mother of Nathan Dane II, of the Class of 1937, Winkley Professor of Latin Language and Literature, the trophy is awarded each spring to a senior member of a varsity women's team who "best

exemplifies the highest qualities of character, courage, and commitment to team play.” (1978)

Francis S. Dane Baseball Trophy: A trophy presented to the College by friends and members of the family of Francis S. Dane, of the Class of 1896, is awarded each spring “to that member of the varsity baseball squad who, in the opinion of a committee made up of the Dean of the College, the Director of Athletics, and the Coach of Baseball, best exemplifies high qualities of character, sportsmanship, and enthusiasm for the game of baseball.” (1965)

William J. Fraser Basketball Trophy: The William J. Fraser Basketball Trophy, presented by Harry G. Shulman, A.M. (Bowdoin 1971), in memory of William J. Fraser, of the Class of 1954, is awarded annually to that member of the basketball team who best exemplifies the spirit of Bowdoin basketball. The recipient is selected by the coach, the athletic director, and the Dean of the College. (1969)

Andrew Allison Haldane Cup: A cup given by fellow officers in the Pacific in memory of Captain Andrew Allison Haldane, USMCR, of the Class of 1941, awarded to a member of the senior class who has outstanding qualities of leadership and character. (1945)

Lucien Howe Prize: A fund of \$8,893, given by Lucien Howe, M.D., Sc.D., of the Class of 1870. Fifty dollars from the income is awarded by the Faculty to that member of the Senior Class who as an undergraduate, by example and influence has shown the highest qualities of gentlemanly conduct and character, the award to be either in cash or in the form of a medal, according to the wish of the recipient. The remainder is expended by the president to improve the social life of the undergraduates. (1920)

Winslow R. Howland Football Trophy: A trophy presented to the College by his friends in memory of Winslow R. Howland, of the Class of 1929, is awarded each year to that member of the varsity football team who has made the most marked improvement on the field of play during the football season, and who has shown the qualities of cooperation, aggressiveness, enthusiasm for the game, and fine sportsmanship so characteristic of Winslow Howland. (1959)

Elmer Longley Hutchinson Cup: A cup given by the Bowdoin chapter of Chi Psi Fraternity in memory of Elmer Longley Hutchinson, of the Class of 1935, is awarded annually to a member of the varsity track squad for high conduct both on and off the field of sport. (1939)

Samuel A. Ladd Tennis Trophy: A trophy presented by Samuel Appleton Ladd, Jr., of the Class of 1929, and Samuel Appleton Ladd III, of the Class of 1963, awarded to a member of the varsity team who during the year by his

sportsmanship, cooperative spirit, and character has done the most for tennis at Bowdoin. The award winner's name is to be inscribed on the trophy. (1969)

George Levine Memorial Soccer Trophy: A trophy presented by Lieutenant Benjamin Levine, coach of soccer in 1958, is awarded to that member of the varsity soccer team exemplifying the traits of sportsmanship, valor, and desire. (1958)

Robert B. Miller Trophy: A trophy, given by former Bowdoin swimmers, in memory of Robert B. Miller, coach of swimming, is awarded annually "to the Senior who, in the opinion of the coach, is the outstanding swimmer on the basis of his contribution to the sport." Winners will have their names inscribed on the trophy and will be presented with bronze figurines. (1962)

Hugh Munro, Jr., Memorial Trophy: A trophy given by his family in memory of Hugh Munro, Jr., of the Class of 1941, who lost his life in the service of his country. It is inscribed each year with the name of that member of the Bowdoin varsity hockey team who best exemplifies the qualities of loyalty and courage which characterized the life of Hugh Munro, Jr. (1946)

Paul Nixon Basketball Trophy: Given to the College by an anonymous donor and named in memory of Paul Nixon, L.H.D., dean at Bowdoin from 1918 to 1947, in recognition of his interest in competitive athletics and sportsmanship, this trophy is inscribed each year with the name of the member of the Bowdoin varsity basketball team who has made the most valuable contribution to this team through his qualities of leadership and sportsmanship. (1959)

Col. William Henry Owen Premium: An award of the income of a fund of \$1,162 established by Frederick Wooster Owen, M.D., in memory of his brother, a member of the Class of 1851, is made at Commencement to some graduating student recognized by his or her fellow students as a "humble, earnest, and active Christian." (1916)

Wallace C. Philoon Trophy: Given by Wallace Copeland Philoon, M.S., Major General, U.S.A., of the Class of 1905, this trophy is awarded each year to a nonletter winner of the current season who has made an outstanding contribution to the football team. The award is made to a man who has been faithful in attendance and training and has given his best efforts throughout the season. (1960)

William J. Reardon Memorial Football Trophy: A replica of this trophy, which was given to the College by the family and friends of William J. Reardon, of the Class of 1950, is presented each year to a senior on the varsity football team who has made an outstanding contribution to his team and his college as a man of honor, courage, and ability, the qualities which William J.

Reardon exemplified at Bowdoin College on the campus and on the football field. (1958)

Reid Squash Trophy: A fund of \$406 established in 1975 by William K. Simonton, of the Class of 1943, to be awarded annually to the member of the squash team who has shown the most improvement. The recipient is to be selected by the coach of the team, the director of athletics, and the Dean of the College.

Franklin Delano Roosevelt Cup: A cup, furnished by the Bowdoin chapter of Alpha Delta Phi Fraternity, is inscribed annually with the name of that member of the three lower classes whose vision, humanity, and courage most contribute to making Bowdoin a better college. (1945)

Harry G. Shulman Hockey Trophy: This trophy is awarded annually to that member of the hockey squad who has shown outstanding dedication to Bowdoin hockey. The recipient will be elected by a vote of the coach, the athletic director, and the Dean of the College. (1969)

Lucy L. Shulman Trophy: Given by Harry G. Shulman, A.M. (Bowdoin 1971), in honor of his wife, this trophy is awarded annually to the outstanding woman athlete. The recipient will be selected by the director of athletics and the Dean of the College. (1975)

Paul Tiemer, Jr., Men's Lacrosse Trophy: Given by Paul Tiemer, of the Class of 1928, in memory of his son Paul Tiemer, Jr., this trophy is awarded annually to the senior class member of the varsity lacrosse team who is judged to have brought the most credit to Bowdoin and to himself. The recipient is to be selected by the varsity lacrosse coach, the director of athletics, and the Dean of the College. (1976)

David Berdan Wenigman Memorial Wrestling Trophy: Given by Henry P. Bristol II, of the Class of 1976, in memory of his friend David Berdan Wenigman, this trophy is awarded each year to the member of the varsity wrestling team who best exemplifies the qualities of character, courage, and enthusiasm for the sport of wrestling. The recipient is chosen by the Dean of the College and the director of athletics, with the advice of the wrestling coach. (1984)

Prizes in Extracurricular Activities and Scholarship

James Bowdoin Cup: This cup, given by the Alpha Rho Upsilon Fraternity, is awarded annually on James Bowdoin Day to the student who in his previous college year has won a varsity letter in active competition and has made the highest scholastic average among the students receiving varsity letters. In case two or more students should have equal records, the award shall go to the

one having the best scholastic record during his or her college course. The name of the recipient is to be engraved on the cup and the cup retained for the following year by that college group (fraternity or nonfraternity) of which the recipient is a member. (1947)

Orren Chalmer Hormell Cup: A cup, given by the Sigma Nu Fraternity at the College, in honor of Orren Chalmer Hormell, Ph.D., D.C.L., DeAlva Stanwood Alexander Professor of Government, is awarded each year to a sophomore who, as a freshman, competed in freshman athletic competition as a regular member of a team, and who has achieved outstanding scholastic honors. A plaque inscribed with the names of all the cup winners is kept on display. (1949)

Roliston G. Woodbury Memorial Award: Established in 1963 as the Roliston G. Woodbury Award by the Textile Veterans Association to honor the contributions of Roliston G. Woodbury, of the Class of 1922 and a member of the Board of Overseers, to the textile industry, it was renamed the Roliston G. Woodbury Memorial Award following his death in 1968. The annual award consists of a \$50 U. S. Savings Bond and a bronze medallion and is awarded to a student on the basis of scholarship, leadership, and extracurricular activities. (1963)

Miscellaneous Prize

Abraxas Award: An engraved pewter plate is awarded to the school sending two or more graduates to the College, whose representatives maintain the highest standing during their freshman year. This award was established by the Abraxas Society. (1915)

PHI BETA KAPPA

The Phi Beta Kappa Society, national honorary fraternity for the recognition and promotion of scholarship, was founded at the College of William and Mary in 1776. The Bowdoin Chapter (Alpha of Maine), the sixth in order of establishment, was founded in 1825.

Election is on the basis of scholarly achievement, in estimating which, consideration is given primarily to grades in courses, secondarily (at graduation) to departmental honors. Elections may be held twice a year—in February and May. Candidates must have completed twenty-four semester units for college credit.

JAMES BOWDOIN DAY

Named in honor of the earliest patron of the College, James Bowdoin Day was instituted in 1941 to accord recognition to those undergraduates who distinguish themselves in scholarship. Inaugurated by Stanley Perkins Chase '05, Henry Leland Chapman Professor of English Literature (1925-1951), the

exercises consist of the announcement of awards, the presentation of books, a response by an undergraduate, and an address.

The James Bowdoin Scholarships, carrying no stipend, are awarded to undergraduates who have completed a minimum of two semesters' work. The scholarships are determined on the basis of a student's entire record at Bowdoin. To be named a James Bowdoin Scholar a student must obtain three-quarters honor grades, including one-quarter high honor grades. A student must obtain two additional high honor grades to balance each grade of pass, in addition to the three-quarter honor grades.

A book, bearing a replica of the early College bookplate serving to distinguish the James Bowdoin Collection in the library, is presented to every undergraduate who has carried a full course program and has received a grade of high honors in each of his courses during the last academic year.

THE APPLIED ENVIRONMENTAL SCIENCE FUND

This fund was established in 1981 by gifts from Robert C. Porter of the Class of 1934, the Ivy Fund, Suburban Propane Gas Corporation, March & McLennan Companies, Inc., and Eberstadt Asset Management, Inc. It is to be used to support the research and instructional program of the Marine Research Laboratory and the Hydrocarbon Research Center.

FACULTY DEVELOPMENT FUND

This fund, now amounting to approximately \$364,135, was established by Charles Austin Cary, LL.D., of the Class of 1910. The income from the fund is expended each year "for such purpose or purposes, to be recommended by the President and approved by the Governing Boards, as shall be deemed to be most effective in maintaining the caliber of the Faculty." These purposes may include, but not be limited to, support of individual research grants, productive use of sabbatical leaves, added compensation for individual merit or distinguished accomplishment, other incentives to encourage individual development of teaching capacity, and improvement of faculty salaries.

FACULTY RESEARCH FUND

This fund, founded by the Class of 1928 on the occasion of its twenty-fifth anniversary and amounting to \$142,750, is open to additions from other classes and individuals. The interest from the fund is used to help finance research projects carried on by members of the faculty.

SUMNER TUCKER PIKE FUND

This fund, amounting to \$10,969, was established by an anonymous donor in 1966 in recognition of the many significant services to the country and to

the College of Sumner T. Pike, LL.D., of the Class of 1913. The principal and/or income of this fund is to be applied at the discretion of the president of Bowdoin College, with preference given to support of research and/or publications of studies in the social sciences (including history).

UNDERGRADUATE RESEARCH ASSISTANCE

Surdna Foundation Undergraduate Research Fellowship Program

An undergraduate research fellowship program established in 1959 was renamed in 1968 the Surdna Foundation Undergraduate Research Fellowship program in recognition of two gifts of the Surdna Foundation. The income from a fund of \$257,560, which these gifts established, underwrites the program's costs. Fellowships may be awarded annually to highly qualified seniors. Each Surdna Fellow participates under the direction of a faculty member in a research project in which the faculty member is independently interested.

The purpose is to engage the student directly in a serious attempt to extend man's knowledge. Each project to which a Surdna Fellow is assigned must therefore justify itself independently of the program, and the fellow is expected to be a participant in the research, not a mere observer or helper. The nature of the project differs from discipline to discipline, but all should give the fellow firsthand acquaintance with productive scholarly work. Should the results of the research be published, the faculty member in charge of the project is expected to acknowledge the contribution of the Surdna Fellow and of the program.

Surdna Fellows are chosen each spring for the following academic year. Awards are made on the basis of the candidate's academic record and departmental recommendation, his or her particular interests and competence, and the availability at the College of a research project commensurate with his talents and training. Acceptance of a Surdna Fellowship does not preclude working for honors, and the financial need of a candidate does not enter into the awarding of fellowships. Surdna Fellows are, however, obligated to refrain from employment during the academic year. The stipend is \$1,200 for part-time research during the academic year or full-time research in eight weeks of the summer. There are eight awards annually.

Alfred O. Gross Fund

This fund of \$9,977, established by Alfred Otto Gross, Ph.D., Sc.D., Josiah Little Professor of Natural Science, and members of his family, is designed to assist worthy students in doing special work in biology, preferably ornithology. Income from the fund may be used for such projects as research on Kent

Island, travel to a given region or library for particular work, purchase of special apparatus, attendance at an ornithological congress or other scholarly gatherings, and publication of the results of research. Although the fund is administered by Bowdoin College, assistance from the fund is not limited to Bowdoin students.

Fritz C. A. Koelln Research Fund

This fund, which amounts to \$4,404, was established in 1972 by John A. Gibbons, Jr., of the Class of 1964, to honor Fritz C. A. Koelln, professor of German and George Taylor Files Professor of Modern Languages Emeritus, who was an active member of the Bowdoin faculty from 1929 until 1971. A maximum grant of \$250 may be awarded annually to a faculty-student research team to support an interdisciplinary research project. At the discretion of the granting committee, the award may be to defray travel and research expenses, to purchase books and equipment, to pay costs of publishing research results, as a direct stipend to the students, or any combination of the above. In no case shall the award take the form of a direct stipend to the faculty member.

Edward E. Langbein Summer Research Grant

An annual gift of the Bowdoin Parents' Fund is awarded under the direction of the president of the College to undergraduates or graduates to enable the recipients to participate in summer research or advanced study directed towards their major field or life work. Formerly the Bowdoin Fathers Association Fund, the grant was renamed in 1970 in memory of a former president and secretary of the association.

Research, Educational, and Conference Facilities

BETHEL POINT MARINE RESEARCH STATION

THE COLLEGE's marine research facility is located approximately ten miles from the campus on a seventeen-acre parcel of land with considerable shore frontage. Two laboratories are situated on the land. All major coastal environments of Maine are represented in microcosm, offering a unique opportunity for study. In conjunction with the hydrocarbon research performed by Bowdoin's Department of Chemistry, the staff of the Bethel Point facility studies the chemical and biological consequences of oil spills on marine environments. While much of this study has been performed at the station and other points on the Maine coast, Bowdoin research teams have investigated spills in France, Puerto Rico, and various locations along the eastern seaboard of the United States.

Directed by Dr. Edward S. Gilfillan, the Bethel Point Marine Research Station provides opportunities for independent study during the academic year and some summer research positions for Bowdoin students.

BOWDOIN SCIENTIFIC STATION

The College maintains a field station at Kent Island, off Grand Manan, in the Bay of Fundy, New Brunswick, Canada, where qualified students can conduct field work on biological problems. Kent Island, containing about 200 acres and several buildings, was presented to the College in 1935 by John Sterling Rockefeller. Charles E. Huntington, professor of biology, is the director of the station.

Kent Island is a major seabird breeding ground and the home of various land birds. Its location makes it a concentration point for migrating birds in spring and fall. The famous Fundy tides create excellent opportunities for the study of marine biology. The terrestrial habitats are surprisingly varied for an island of this size.

No formal courses are offered at the station, but students from Bowdoin and other institutions are encouraged to select problems for investigation at Kent Island during the summer and to conduct field work on their own initiative with the advice and assistance of the Department of Biology. Approved work at the station is acceptable for credit as independent study. Field trips of short duration to Kent Island are a feature of Bowdoin's courses in ecology and ornithology.

Faculty members and graduate students from other institutions have often

used the facilities of the station in their research. They have helped the undergraduate members of the station through informal instruction and as examples of experienced investigators at work.

Financial assistance for students doing research at Kent Island is available from the Alfred O. Gross Fund (see pages 234-235). Other funds which support the Bowdoin Scientific Station are the Kent Island Fund, the Heizaburo Saito Fund, and the Roy Spear Memorial Fund.

BRECKINRIDGE PUBLIC AFFAIRS CENTER

The Breckinridge Public Affairs Center was given to Bowdoin in 1974 by Marvin Breckinridge Patterson, whose husband was the Honorable Jefferson Patterson of St. Leonard, Maryland. Situated on a 23-acre estate on the York River in southern Maine, the center includes a 25-room main house, a formal garden, playhouse, gymnasium, tennis court, loggia, and a 110-foot, circular, saltwater swimming pool. River House, the main house, was designed by Guy Lowell in 1905 and built in the French tradition with capped chimneys, hipped dormers, and a mansard roof about the portico. It is on the National Register of Historic Places. The estate is named in honor of Mrs. Patterson's family, who built River House.

Bowdoin uses the center for classes, seminars, and meetings of educational, cultural, and civic groups. Business and professional organizations also schedule the center for planning sessions, management training, and staff development activities. The center is open from April 1 to July 25 and from September 20 through mid-December each year.

COLEMAN FARM BANDING STATION

During the course of the academic year, students conduct field study in ornithology at a site three miles south of the campus, utilizing a tract of College-owned land which extends to the sea. Numerous habitats of resident birds are found on the property, and it is a stopover point for many migratory species. Organized by students in 1975, the Coleman Farm Banding Station is equipped by the College and operates under the direction of Dr. Huntington.

WCBB-TV

WCBB-TV is a public television station formed by Bates, Bowdoin, and Colby colleges in 1961. It is licensed to Colby-Bates-Bowdoin Educational Telecasting Corporation and serves approximately 750,000 people in southern Maine and eastern New Hampshire. At the time of its founding, it was the first noncommercial television station in Maine, the third in New England, and one of the earliest in the nation. It is supported primarily by contributions

from viewers, an annual auction, and grants from business, industry, and foundations.

WCBB-TV broadcasts a wide variety of programs, including programs for use in the schools and for a general home audience. In addition to local programs produced by members of the staff, WCBB-TV broadcasts programs provided by the Public Broadcasting System and the Eastern Educational Telecasting Network.

Degrees Conferred in May 1984

BACHELOR OF ARTS

Stephen Field Achilles	Alice Kate Brebner
William Henry Adams III	Beth Sprague Brodie '82
Scott Adelman	Stephen Houghton Brooks
Ejaz Ahmad '85	Anne Christine Brown
Jonathan Steven Albin	Pamela Jean Brown
Donna Marie Anderson	MaryLin Bruce
Michael Sean Andreasen	Kerry Burke
Janet Isabel Andrews '83	Polly Sue Burkholder
Mark William Anthoine	Katherine MacPherson Bussey
Kary William Antholis	Karen Ann Butterfield
Dean Michael Antonakes	Leslie Alane Cadwell
Sandra Ana Antonovic	David Thomas Calhoun
Joseph Francis Ardagna	Michel Joseph Callewaert
Marjorie Sale Arundel	Ruth Evelyn Campos
Judith Marie Austin	Diane Marie Cannon
Camille Marie Babineau	Pamela Mary Caputo
Gloria Patricia Bachelder	Henrietta Elizabeth Cathey
Elizabeth Ames Badger	Rebecca Frances Center
Cynthia Ludlow Bainton	Kathy Ellen Chazan
Scott Kenneth Barker	Jonathan S. Chester
Laura Clarke Barnard '83	Christopher Alexander Chronis
Lisa Anne Barresi	Danny James Cisneros
Shereen Ruth Barry	Gregory Randolph Dexter Clark
Patricia Jean Bauman	Margaret Ann Clavette
Robert Christopher Baumann	Francis Gregory Coffey
Thomas Mark Beckley '83	Sarah Elizabeth Collins
Michael Daniel Bergman	Julie Wentworth Colliton
Thomas Roberts Berry	Thomas Krebs Comfort
James Ray Billingsley, Jr.	Rose Susan Como
Monelle Guylaine Bisson	David Garrett Conover '83
Carl Henry Blake	Elizabeth Ann Conrod
Nathan Jon Blum	Katharine Jane Conrod
Adam William David Bock	William R. Conroy, Jr.
Stephen Paul Boghossian	Todd Maxwell Cooke
Jacqueline Marie Bolduc	Emily Katharine Coon
John Mark Boyd, Jr.	Howard Ames Coon III
Rachel Mary Boylan	Linda Copelas
William Kimball Bradford	Christina Rue Cork

Margaret Alicia Couch	Thomas Christopher Glaster
Thomas John Cox	Amy Brown Gleason
Kevin Thomas Coyle	Joanne Esther Goldman
Patrick Michael Croston	Kevin Martin Goldstein
Joseph Patrick Curtin	Tracy Lynn Goller
Christopher Tynan Cushing	Hannia Lisette Gonzalez
Carolyn Anne Danaher	Daniel Ray Gorin
Andrew Jordan Darcy	Richard Green
Ruth Allyn Davis	Henry Fox Greig II
Sara Elisabeth Delogu	Melanie Elizabeth Griem
Carmen Bibianne Dionne	Eileen Joanne Griffin
Brian Francis Dolan '83	Ellen Celine Gross
John Whitney Donnelly	Mary Hayes Gute
James Michael Driscoll	Ann Leslie Harrisburg
Kari Elizabeth Drs	John Clifford Hart
Jennifer Lee Dunn	Peter Gregory Hastings II '83
Julia Claire Earnest	Sandra Marie Hebert
Jay Smith Eastman	Michael John Hegarty
Lucy Coleman Edmondson	Michael Lloyd Heytens '83
David Jonathan Ellis	Darcy Jay Higgins
Martha Enson	William Potter Hinckley
Cornelia Cass Eskin	Delia Ann Hitz '83
John Martin Evans	Darryl Hodges
James McIndoe Eysenbach	Lars Erik Holmdahl
Dianne Carol Fallon	Lisa Ann Holzwarth
Kristen Downing Farrow	Robert Morton Howard
Ignacio Faus	Sarah Elizabeth Hughes '81
Hugh Sadler Ferguson	Patricia Louise Huss
Susan T. Fink	Madeline Evans Hutcheson
Matthew T. Fisher	Charles Ralston Irving III
Jonathan Fitzgerald	Christine Helen James
Peter John Fitzpatrick	Amy Caroline Johnson
Deborah Joan Flynn '83	Brenda Louise Johnson
Ella Lucinda Frederiksen	Philippa Margaret Jollie
Lauren Elizabeth Freeman	Dana Hamilton Jones
Richard Jay Friedland	Thomas Starke Jones
Shirley Carter Friend	Martha Gail Jutras
Suzanne Louise Friot	Kristin AnnMarie Keefe
Karen Lee Fuller	Barbara Jean Kelly
Barbara Erskine Futter	Ailsa Kennedy
Justin Theodore Gerstle, Jr.	Jonathan Woodman Kimball
Marcus Bartlett Giamatti	Karen Marie Kinsella
Lindsay Gibson	Jeffrey Joseph Kirouac

Bertram William Kline, Jr.	William Michael Masu Mushkin
Ross M. Krinsky	Garth Andrew Myers
Angelo Joseph Kusber	Willis E. Nalle
Stephen Patrick Laffey	Karen Lorraine Natalie
Sarah-Louise Stella LaJoie	Anne Rankin Nelson
Todd Timothy Larson	Linda L. Nelson '83
Alison Leavitt	Scott Maxwell Nelson
Tracey Nielsen Leavitt	Jonathan Harrison Newman
Michael Tze-Hau Lee	Tamara Alexandra Nikuradse
Robert Henry Levine '83	Elizabeth Allriott O'Brien
Kirk Anthony Lilley '83	Kevin Vincent O'Connor '83
Elaine Sue Lincoln	Scott Eric Olitsky '85
Steven Michael Linkovich	Nelson Rui Oliveira
Charles Robert Luca	Ann Steiner O'Reilly
John Dougald MacGillivray	William Alfred Ouellette
Bruce J. MacGregor	Kim Pappas
John Scott MacKay	Simone Maria Paradis
Maria Susana MacLean	David James Pardus
Timothy Roark Mangin	Jennifer Marquitta Pasha
Thomas James Marcelle	Gregory John Paton
Lauren Michele Marks	Karen Pierce Pechilis
Joel Ben Maron	Lynn Ann Pellegrino
Mary Jo Mathieson	William Scott Perkins, Jr. '83
Shawn Michael McDermott '83	Thomas S. Perrault, Jr.
Daniel Joseph McDowell	Elizabeth Mary Peters
Kevin Francis McKelvey '83	Kimberly Marie Petersen
Thomas James McKeon	Thomas James Phillips
Brendan C. McNally	David Eugene Pinkham
Ann Reed McWalter	Deborah Gwendolyn Pitcher
Robert Livingston Mead	Karen Leigh Potter
Marcia Lynn Meredith	Cecile F. Poulin
Gregory Thomas Merklin	Howard Francis Powers, Jr.
Deborah Marie Merrill	Ilya Cristy Pratt
Jeffrey Vanderburg Merwin	Thomas J. Putnam
Michael Andrew Miller	Lynne Suzanne Quinto
Lisa Yvette Milner	Kerry Maura Randall
Lisa Marie Mitchell	Darcy Marietta Raymond
Stephen Joseph Mitchell	Bethann Reed
Steven Gary Mlodinow	Elizabeth Ann Reichheld
Matthew John Monaghan	Mary Lynn Reiling
William Garrison Moore	George Albert Reisch
Alan Searight Murphy III	Judith Clifford Riker
Edith Priscilla Murphy	Douglas Alexander Robertson

David James Rodman	Karen Kelley Sylvester
Brian John Rowe	Melinda R. Talarico
Jean Louis Roy	Ian Charles Anthony Taylor
William Alexander Rule	Meredith Joan Taylor
Beverly Gayle Russell	Pamela Sue Taylor
Martha Alice Ryan	Elizabeth Ruth Thomas
Ann Maurey Sargent	Nicholas Sturgis Thorndike
Kathryn Louise Sargent	Mark Douglas Totten
Pamela Hazen Sawyer	Kathleen Marie Trainor '83
Katherine Mitchell Schacht	Katherine Anne Treadway
Stephen J. Schaphorst	Stephen John Trichka
Christopher Forest Schenck	Gregory Blair Troutman
Robert Frederick Schmoll	Warren Arthur Turner
Robert David Sciolla	Kaoru Umino
Elizabeth Schragger Segal	Christopher Karl van Leer
David Roland Sheff	Melissa G. Verrochi
Christopher Jon Simon	Gretchen Anne Walter '83
Tracy Merritt Sioussat	Michael Anthony Wang
Jeffrey Arthur Smith	John Russell Ward '83
Roxa Lavinia Smith	Jane Hale Warren
Anne Delaney Snider	Eric Lee Washburn
Elizabeth Ann Snider	Valerie Lynn Watson
Deborah Lynne Sparrow	Robert David Webb '85
Heidi Kay Spindell	Jeffrey Hersey Webster
Sheila Elizabeth Spratt	Alexander Weiner
William Scott Stauber	Innes Stewart Weir
Daniel Lanius Steele	John Timothy Wheaton
Robert Wade Stephens	Robert Emmett White, Jr.
Catherine Lillian Stevens	Sandra Louise White '83
Sarah L. Stevens	William Harris White
Michael James Stillman	Robert Leader Whitman '83
Maurie Lynne Stockford	Jack Friedman Wiener
Stephanie Romaine Stockwell '83	Kendra Elizabeth Wiley
Wendy Helene Stonestreet	Russell Paul Williams, Jr.
Martha Stacey Stuart	Mary Caroline Williamson
Cynthia Anne Surprenant	David Hawkins Wilson
Robert Bartholf Surrick, Jr.	Nina Gail Winham
Mark Richard Swann	David Adam Zelz
Steven John Swindell	Grace Loretta Zur

RECIPIENTS OF HONORARY DEGREES

Arnold R. Brossi

Doctor of Science

Leroy Dudley Cross

Master of Arts

Harriet Putnam Henry

Doctor of Laws

Merton Goodell Henry '50

Doctor of Laws

Thomas Reeve Pickering '53

Doctor of Laws

Lois Dickson Rice

Doctor of Laws

Elizabeth Shull Russell

Doctor of Science

Friedrich Alexander von Huene '53

Doctor of Music

Adam James Walsh

Doctor of Education

Appointments, Prizes, and Awards

PHI BETA KAPPA

Ejaz Ahmad '85	Stephen Joseph Mitchell
Jonathan Steven Albin	Karen Lorraine Natalie
Gloria Patricia Bachelder	Thomas John Putnam
Lisa Anne Barresi	George Albert Reisch
Nathan Jon Blum	Katherine Mitchell Schacht
John Mark Boyd, Jr.	Tracy Merritt Sioussat
MaryLin Bruce	Cynthia Anne Surprenant
Emily Katharine Coon	Ian Charles Anthony Taylor
Matthew T. Fisher	Meredith Joan Taylor
Ella Lucinda Frederiksen	Nicholas Sturgis Thorndike
Justin Theodore Gerstle, Jr.	Mark Douglas Totten
Melanie Elizabeth Griem	Warren Arthur Turner
Barbara Jean Kelly	Kaoru Umino
Angelo Joseph Kusber	Robert Emmett White, Jr.
Gregory Thomas Merklin	William Harris White
Deborah Marie Merrill	

HONORARY APPOINTMENTS

Summa Cum Laude

Ejaz Ahmad '85	Marcia Lynn Meredith
Jonathan Steven Albin	Gregory Thomas Merklin
Janet Isabel Andrews '83	Deborah Marie Merrill
Lisa Anne Barresi	Stephen Joseph Mitchell
Nathan Jon Blum	Steven Gary Mlodinow
John Mark Boyd, Jr.	Karen Lorraine Natalie
MaryLin Bruce	Jonathan Harrison Newman
Emily Katharine Coon	Scott Eric Olitsky '85
David Jonathan Ellis	George Albert Reisch
Ignacio Faus	Ian Charles Anthony Taylor
Matthew T. Fisher	Mark Douglas Totten
Justin Theodore Gerstle, Jr.	Warren Arthur Turner
Melanie Elizabeth Griem	Kaoru Umino
Barbara Jean Kelly	Gretchen Anne Walter '83
Angelo Joseph Kusber	William Harris White

Magna Cum Laude

Kary William Antholis	Sarah-Louise Stella LaJoie
Sandra Ana Antonovic	Todd Timothy Larson
Camille Marie Babineau	Alison Leavitt
Gloria Patricia Bachelder	Kirk Anthony Lilley '83
Shereen Ruth Barry	Charles Robert Luca
Patricia Jean Bauman	John Scott MacKay
Thomas Mark Beckley '83	Ann Reed McWalter
Monelle Guylaine Bisson	Lisa Marie Mitchell
Adam William David Bock	William Garrison Moore
David Thomas Calhoun	Tamara Alexandra Nikuradse
Rebecca Frances Center	Karen Pierce Pechilis
Kathy Ellen Chazan	Kimberly Marie Petersen
Christopher Alexander Chronis	Deborah Gwendolyn Pitcher
Margaret Ann Clavette	Cecile F. Poulin
Thomas Krebs Comfort	Thomas John Putnam
Rose Susan Como	David James Rodman
David Garrett Conover '83	Beverly Gayle Russell
Todd Maxwell Cooke	Katherine Mitchell Schacht
Thomas John Cox	Elizabeth Schragger Segal
Andrew Jordan Darcy	David Roland Sheff
Jennifer Lee Dunn	Tracy Merritt Sioussat
Julia Claire Earnest	Jeffrey Arthur Smith
Lucy Coleman Edmondson	Roxa Lavinia Smith
Martha Enson	Elizabeth Ann Snider
Dianne Carol Fallon	Robert Wade Stephens
Susan T. Fink	Sarah L. Stevens
Ella Lucinda Frederiksen	Martha Stacey Stuart
Richard Jay Friedland	Cynthia Anne Surprenant
Suzanne Louise Friot	Karen Kelley Sylvester
Karen Lee Fuller	Meredith Joan Taylor
Joanne Esther Goldman	Nicholas Sturgis Thorndike
Michael Lloyd Heytens '83	Jane Hale Warren
Lars Erik Holmdahl	Innes Stewart Weir
Christine Helen James	Robert Emmett White, Jr.
Stephen Patrick Laffey	Jack Friedman Wiener

Cum Laude

William Henry Adams III	Thomas Roberts Berry
Marjorie Sale Arundel	Stephen Houghton Brooks
Judith Marie Austin	Anne Christine Brown
Michael Daniel Bergman	Pamela Jean Brown

Michel Joseph Callewaert	Elizabeth Alliot O'Brien
Pamela Mary Caputo	Ilya Cristy Pratt
Linda Copelas	Kerry Maura Randall
Kevin Thomas Coyle	Douglas Alexander Robertson
Shirley Carter Friend	Brian John Rowe
Henry Fox Greig II	Heidi Kay Spindell
Lisa Ann Holzwarth	Michael James Stillman
Brenda Louise Johnson	Stephanie Romaine Stockwell '83
Tracey Nielsen Leavitt	Wendy Helene Stonestreet
Steven Michael Linkovich	Mark Richard Swann
Maria Susana MacLean	Elizabeth Ruth Thomas
Lauren Michele Marks	Katherine Anne Treadway
Thomas James McKeon	Gregory Blair Troutman
Brendan C. McNally	Eric Lee Washburn
Robert Livingston Mead	Valerie Lynn Watson
Alan Searight Murphy III	Mary Caroline Williamson
Edith Priscilla Murphy	David Adam Zelz
William Michael Masu Mushkin	Grace Loretta Zur

HONORS IN MAJOR SUBJECTS

Afro-American Studies: *High Honors*, Tamara Alexandra Nikuradse.

American Studies: *Highest Honors*, Linda L. Nelson '83.

Art History: *High Honors*, Kathy Ellen Chazan.

Biochemistry: *Highest Honors*, Nathan Jon Blum.

High Honors, Margaret Ann Clavette, David Jonathan Ellis, Ignacio Faus, Steven Gary Mlodinow, Tracy Merritt Sioussat, Ian Charles Anthony Taylor.

Honors, Scott Adelman.

Biology: *Honors*, William R. Conroy, Jr.

Chemistry: *Highest Honors*, Jonathan Steven Albin, Richard Jay Friedland.

High Honors, Justin Theodore Gerstle, Jr., Gregory Thomas Merklin, Mark Douglas Totten.

Honors, Sandra Ana Antonovic, Gloria Patricia Bachelder, Marcia Lynn Meredith, Brian John Rowe.

Classics: *High Honors*, Ruth Evelyn Campos.

Honors, Karen Ann Butterfield.

Economics: *Honors*, Karen Lee Fuller.

English: *High Honors*, Beverly Gayle Russell.

Honors, Dianne Carol Fallon, Maria Susana MacLean, Innes Stewart Weir.

Environmental Studies: *Honors*, Thomas Mark Beckley '83.

German: *Honors*, Camille Marie Babineau, Simone Maria Paradis.

Government: *High Honors*, Thomas John Putnam.

Honors, Jonathan Fitzgerald, Ann Leslie Harrisburg.

History: *Highest Honors*, Barbara Jean Kelly.

High Honors, Kary William Antholis, Adam William David Bock, Christopher Alexander Chronis, Edith Priscilla Murphy, Jonathan Harrison Newman, Cecile F. Poulin.

Honors, Monelle Guylaine Bisson, Barbara Erskine Futter, Garth Andrew Myers, Howard Francis Powers, Jr., Bethann Reed, Martha Alice Ryan, William Scott Stauber, John Russell Ward '83, Robert Leader Whitman '83.

Latin American Studies: *Honors*, Susan T. Fink.

Mathematics: *Highest Honors*, Warren Arthur Turner.

High Honors, Stephen Joseph Mitchell.

Music: *High Honors*, Joanne Esther Goldman, Timothy Roark Mangin.

Philosophy: *Highest Honors*, Karen Lorraine Natalie, Kaoru Umino.

Honors, Thomas James McKeon.

Physics: *Highest Honors*, Ejaz Ahmad '85, Warren Arthur Turner.

High Honors, George Albert Reisch.

Honors, Robert Christopher Baumann.

Psychobiology: *High Honors*, Linda Copelas, Jeffrey Joseph Kirouac, Ann Reed McWalter.

Honors, Brenda Louise Johnson.

Psychology: *Highest Honors*, Gretchen Anne Walter '83.

High Honors, Ella Lucinda Frederiksen.

Honors, Stephen Field Achilles, Darryl Hodges, Lauren Michelle Marks, Lynn Ann Pellegrino, Kerry Maura Randall.

Religion: *Highest Honors*, Karen Pierce Pechilis.

High Honors, Kirk Anthony Lilley '83, Jack Friedman Wiener.

Honors, Kathryn Louise Sargent, Elizabeth Schragger Segal.

Romance Languages: *Highest Honors*, Charles Robert Luca, Karen Lorraine Natalie, Jane Hale Warren.

High Honors, Daniel Joseph McDowell, Katherine Mitchell Schacht.

Russian Studies: *Honors*, Meredith Joan Taylor.

Sociology: *Highest Honors*, Deborah Marie Merrill.
Honors, Rose Susan Como.

Visual Arts: *High Honors*, William Henry Adams III, Jeffrey Arthur Smith.
Honors, Ilya Cristy Pratt.

APPOINTMENTS, PRIZES, AND AWARDS

Graduate Scholarships

Arts and Sciences

Charles Carroll Everett Scholarship: Ejaz Ahmad '85.

Timothy and Linn Hayes Scholarship: Deborah Marie Merrill.

Guy Charles Howard Scholarship: Emily Katharine Coon.

Henry W. Longfellow Graduate Scholarship: Cheryl Ann Foster '83.

Wilmot Brookings Mitchell Graduate Scholarship: Barrett Fisher II '80,
 Maryrica Theresa Lottman '75, Gregory Bentley Stone '82, Nicholas Sturgis
 Thorndike.

Galen C. Moses Postgraduate Scholarship: Mary Elizabeth Morton '83.

O'Brien Graduate Scholarships: Meryl Chandler Atwood '83, David Edwin
 Bodman '82, Diane Marie Cannon, Peter Dalton Cooper '81, Ignacio Faus,
 Wanda Evelyn Fleming '82, Garth Andrew Myers, Susan Lynn Reis '82,
 Dennis Charles Sgroi '83.

Nathan Webb Research Scholarship in English: Cheryl Ann Foster '83,
 Gregory Bentley Stone '82.

Law and Medicine

Garcelon and Merritt Fund Scholarships: David Alan Goldschmitt '78, Jeffrey
 Scott Gorodetsky '81, Donald Paul Lombardi '82, Brian Patrick O'Donnell
 '76, Michael David Potitz III '77, Michael Hayes Sisitsky '78, Owen Robert
 Stevens '81, Mark Herrick Worthing '77.

George and Mary Knox Scholars: (1983-1984) Razi Uddin Amin '79, Eric
 Briggs Arvidson '80, Paula M. Gesmundo '83, Mark John Girard '82.
 (1984-1985) Teresa Marie Cavalier '80, Paula M. Gesmundo '83, Mark
 John Girard '82, Barbara Jean Kelly '84, Stephen Patrick Laffey '84,
 Margaret Joan Retondo '78, Terri Lois Young '81.

Lee G. Paul Scholarship: Marijane Leila Benner '83, Barbara Jean Kelly,
 Louise Gabrielle Roman '82.

Robinson-Davis Fund Scholarships: John Mark Boyd, Jr., Natalie Louise Burns '80, Jean Marie Daley '80, Amy Morris Homans '81, Lynn Fair Jackson '81, Dora Anne Mills '82, Michael Joseph Quinlan '82, Margaret Jackson Schoeller '81, Stephen John Trichka, Jr., Kaoru Umino.

Van Swearingen Fund: Mats Agren '83, Kermit Brion Brunelle '83, Caroline Mersereau Foote '81, Patrick John McManus '81, J. Peter Oettgen '82, Steven Jay Rose '79, Terence Keith Trow '82, Andrew Alan Ziskind '80.

Watson Fellowships: Nelson Rui Oliveira, Cecile F. Poulin, Thomas John Putnam.

Undergraduate Awards

Commencement Awards

Goodwin Commencement Prize: Garth Andrew Myers.

Class of 1868 Prize: Kaoru Umino.

DeAlva Stanwood Alexander Prize: 1st: Thomas John Putnam; 2nd: Amy Caroline Johnson.

Andrew Allison Haldane Cup: Dianne Carol Fallon.

Alternate Commencement Speaker: Amy Caroline Johnson.

Class Marshal: Alexander Weiner.

Departmental Prizes

Edgar O. Achorn Prize in Religion: Nancy Marie Gregory '87, Katharine Earnest Holzer '87, Jacob Nicholas Kinnard '86, Daniel Robert Sogg '87.

American Bible Society Prize for Excellence in Biblical Studies: Suzanne Frank Colburn.

Donald and Harriet S. Macomber Prize in Biology: Nathan Jon Blum.

James Malcolm Moulton Prize in Biology: Brita Katherine Nieland '85, Kenneth David Novak '85.

U.S. Chemical Rubber Company Freshman Achievement Award: Philip Alcide Morin '87.

U.S. Chemical Rubber Company Laboratory Award: Brenda Sue Philbrick '87.

American Chemical Society-Undergraduate Award in Analytical Chemistry: Lee Gorham McLaughlin '85.

American Institute of Chemists Award: Gregory Thomas Merklin.

Kamerling Laboratory Award: Xenia Beebe '86.

Merck Index Award: Jonathan Steven Albin.

Philip W. Meserve Prize in Chemistry: Clifford Russell Bowers '85.

William Campbell Root Award: Mark Douglas Totten.

Nathan Gould Classics Prize: Angelo Joseph Kusber.

Noyes Political Economy Prize: Lisa Anne Barresi, Karen Lee Fuller, Stephen Joseph Mitchell.

Academy of American Poets' Prize: Nicholas Sturgis Thorndike.

Brown Composition Prizes: 1st: Kaoru Umino; 2nd: Garth Andrew Myers.

General R. H. Dunlap Prizes: Thomas Mark Beckley '83, Elizabeth Newell Garfield '85.

Hawthorne Prize: Neil Byron Olson '86.

Poetry Prize: Neil Byron Olson '86.

Pray English Prize: Beverly Gayle Russell.

Forbes Rickard, Jr., Poetry Prize: Garth Andrew Myers, Margaret Louise Schneyer '86.

David Sewall Premium: Jonathan Niles Rosen '87, Siobhan Senier '87.

Mary B. Sinkinson Short Story Prize: Darvin Scott Smith '85.

Bertram Louis Smith, Jr., Prize in English Literature: Ann Catherine Bonis '85.

Paul Andrew Walker Award: Dianne Carol Fallon.

Hiland Lockwood Fairbanks Prizes in Public Speaking (English 10): 1st: David James O'Meara '85; 2nd: Alexander Weiner.

Stanley Plummer Prizes: 1st: Sarah L. Stevens; 2nd: Michael Wesley Barnes '86.

Goodwin French Prize: Kirsten Mariana Silvius '87.

Eaton Leith French Prize: Lisa Pauline Cloutier '86.

Charles Harold Livingston Prize in French: Jane Hale Warren.

The Old Broad Bay Prizes in Reading German: David Gunther Pohle '87, John David Welch '85, Kristen Anne Woodbury '86.

Philo Sherman Bennett Prize for Best Essay on Principles of Free Government: Thomas John Putnam.

Jefferson Davis Award: Adam Gilbert Landis '85.

Fessenden Prize in Government: Deborah Lynne Sparrow.

Sewall Greek Prize: Mary Josephine Gorman '86.

Class of 1875 Prize in American History: Edith Priscilla Murphy, Cecile F. Poulin.

James E. Bland History Prize: Barbara Jean Kelly.

Sewall Latin Prize: Nathan Edward Goff '86.

Edward Sanford Hammond Mathematics Prize: Warren Arthur Turner.

Smyth Mathematics Prizes: Ejaz Ahmad '85, Judith Roxanne Hogan '85, Mitchell John Sullivan '86, Warren Arthur Turner.

Anne Bartlett Lewis Memorial Prizes: William Henry Adams III, Kathy Ellen Chazan, Jeffrey Arthur Smith.

Sue Winchell Burnett Music Prize: Polly Sue Burkholder.

Philip W. Cummings Prize in Philosophy: Karen Lorraine Natalie, Kaoru Umino.

Edwin Herbert Hall Physics Prize: Joseph Henry LaCasce, Jr. '86.

Sumner I. Kimball Prize for Excellence in Natural Sciences: Warren Arthur Turner.

Noel C. Little Prize in Experimental Physics: Robert Christopher Baumann.

Philip C. Bradley Spanish Prize: Rebecca Frances Center, Charles Robert Luca.

Edward E. Langbein Summer Research Grant: Nathan Jon Blum.

Earle S. Thompson Student Fund: Leighton Karl Brown '85, Laurie Ann Lutender '85.

James Bowdoin Cup: Warren Arthur Turner.

Orren Chalmer Hormell Cup: Thomas Edward Hamilton '86.

Roliston G. Woodbury Memorial Award: Kaoru Umino.

Women's Basketball Alumnae Award: Amy Louise Harper '85.

Society of Bowdoin Women Athletic Award: Ann Reed McWalter.

Leslie A. Claff Track Trophy: Eric Lee Washburn.

Annie L. E. Dane Trophy: Heidi Kay Spindell.

Francis S. Dane Baseball Trophy: Robert David Sciolla.

William J. Fraser Basketball Trophy: Mark William Anthoine.

Lucien Howe Prize: Thomas John Putnam.

Winslow R. Howland Football Trophy: Richard Fennell '86.

Elmer Longley Hutchinson Cup (Varsity Track): David Eugene Pinkham.

Samuel A. Ladd Tennis Trophy: Peter Lawrence Espo '86.

George Levine Memorial Soccer Trophy: Francis Gregory Coffey.

Robert B. Miller Trophy (Swimming): Charles Ralston Irving III.

Hugh Munro, Jr., Memorial Trophy (Hockey): Christopher Jon Simon.

Paul Nixon Basketball Trophy: William Alexander Rule.

Col. William Henry Owen Premium: Jennifer Marquitta Pasha.

Wallace C. Philoon Trophy (Football): David Seth Bonner '85.

William J. Reardon Memorial Football Trophy: Richard Green.

Reid Squash Trophy: Peter John Fitzpatrick.

Franklin Delano Roosevelt Cup: Debra Jean Forte '86.

Harry B. Shulman Hockey Trophy: Michael Lloyd Heytens '83.

Lucy L. Shulman Trophy: Carolyn Anne Danaher.

Paul Tiemer, Jr., Men's Lacrosse Trophy: Danny James Cisneros.

David Berdan Wenigmann Memorial Wrestling Trophy: David Hawkins Wilson.

Abraham Goldberg Prize: Jacqueline Marie Bolduc.

Bowdoin Film Society Awards (English 13): *Best animation*, Michael Daniel Bergman, Katherine MacPherson Bussey, Tracey Nielsen Leavitt; *best comedy*, Robert John Ferguson '85, Theodore Anton Lund '85, Brian John Rowe, Scott William Umlauf '85; *best documentary*, Scott William Harrison '85; *best dramatic*, Todd Timothy Larson; *best cinematography*, Ilya Christy Pratt, Robert Emmett White, Jr.; *best sound*, Scott William Harrison '85; *best editing*, Scott William Harrison '85; *best film*, Scott William Harrison '85.

Masque and Gown One-Act Play Prizes: *Playwright*, Nicholas Samuel Vokey '86; *director*, Rachel Mary Boylan; *acting awards*, Jacqueline Marie Bolduc, Martha Enson, Kevin Bartlett Joyce '86.

Director of Theater Special Award: Warren Arthur Turner.

Alice Merrill Mitchell Prize: Martha Enson, Marcus Bartlett Giamatti, Kevin Vincent O'Connor.

William H. Moody Award: David Thomas Calhoun, Ilya Cristy Pratt, Robert Emmett White, Jr.

George H. Quinby Award: Claire Pomeroy Curtis '87, Taylor McDowell Mali '87, Juliette Laddon Robbins '87.

The Bowdoin Orient Prize: Donald Paul Willmott '86.

Summer Surdna Foundation Research Fellowships: Ejaz Ahmad '85, Nathan Jon Blum, Ignacio Faus, Deborah Marie Merrill, Ann Maurey Sargent.

Surdna Foundation Undergraduate Research Fellowships: Steven Gary Mlodinow, George Albert Reisch, Warren Arthur Turner.

Prizes in General Scholarship

Brooks-Nixon Prize: Scott Evan Allen '83.

Almon Goodwin Phi Beta Kappa Prize: Nathan Jon Blum.

George Wood McArthur Prize: Ejaz Ahmad '85.

Leonard A. Pierce Memorial Prize: John Mark Boyd, Jr., Karen Lorraine Natalie.

Harry S. Truman Scholarship: Mark Morgan Roberge '86.

Brown Scholarships: Matthew John Monaghan, Stephen Paul St. Angelo '85, Mary Joyce Rogers '86, Jennifer Rae Goldman '87.

Alumni Organizations

ALUMNI ASSOCIATION

THE BOWDOIN COLLEGE ALUMNI ASSOCIATION has as its purpose "to further the well-being of the College and its alumni by stimulating the interest of its members in the College and in each other." Membership is open to former students who during a minimum of one semester's residence earned at least one academic credit toward a degree, to those holding Bowdoin degrees, and to anyone elected to membership by the Executive Committee of the Alumni Council.

The officers of the Alumni Council are ex officio the officers of the Alumni Association. The council members-at-large, directors of the Alumni Fund, a faculty member, treasurer, director of Annual Giving, and director of Alumni Relations serve as the Executive Committee of the council and the association.

ALUMNI COUNCIL

Officers: Laurie A. Hawkes '77, president; I. Joel Abromson '60, vice president; David F. Huntington '67, secretary and treasurer.

Members-at-Large: *Terms expire in 1985:* Daniel F. Hanley, M.D. '39, Laurie A. Hawkes '77, John I. Snow '57, Timothy W. Warren '45. *Terms expire in 1986:* I. Joel Abromson '60, Peter F. Donovan, Jr. '40, Celeste Johnson Frasher '75, Reginald P. McManus, M.D. '52. *Terms expire in 1987:* Robert C. Delaney '55, Peter E. Driscoll '69, John J. Mullane, Jr. '50, Steven C. Munger '65. *Terms expire in 1988:* Walter E. Bartlett '53, Kenneth M. Cole '69, Susan Williamson Peixotto '79, Thomas J. Sheehy, Jr., M.D. '41.

Other members of the council are the editor of the *Bowdoin Alumni Magazine*, a representative of the faculty, the secretary of the College, the director of the Annual Giving, the directors of the Alumni Fund, representatives of recognized alumni clubs, and three undergraduates.

ALUMNI COUNCIL AWARDS

Alumni Service Award: First established in 1932 as the Alumni Achievement Award and changed in name to the Alumni Service Award in 1953, this award is made annually to the person who, in the opinion of alumni, as expressed by the Alumni Council, best represents the alumnus or alumna whose services to Bowdoin most deserve recognition.

The recipient in 1984 was William G. Wadman '49.

Alumni Award for Faculty and Staff: Established by the Alumni Council

in 1963, it is presented each year "for service and devotion to Bowdoin, recognizing that the College in a larger sense includes both students and alumni." The award is made at the annual Homecoming Luncheon in the fall and consists of a Bowdoin clock and a framed citation.

The recipient in 1984 was Sidney J. Watson.

Distinguished Bowdoin Educator Award: Established in 1964 to recognize outstanding achievement in education by a Bowdoin alumnus in any field and at any level of education, except alumni who are members of the Bowdoin faculty and staff, the award consists of a framed citation and \$500.

The recipient in 1984 was Donald F. Weafer '70.

BOWDOIN ALUMNI MAGAZINE

Published four times a year at the College, the *Bowdoin Alumni Magazine* is the magazine of the Bowdoin Alumni Association and is sent without charge to all alumni. It contains articles and news items relating to events at the College as well as news of alumni, alumni clubs, and Alumni Council activities. Established in 1927, it is currently edited by Helen E. Pelletier '81.

BOWDOIN ALUMNI SCHOOLS AND INTERVIEWING COMMITTEES (BASIC)

BASIC is a volunteer association of approximately 650 alumni in the United States and several foreign countries which assists the Admissions Office in the identification and evaluation of candidates. BASIC responsibilities include providing alumni interviews for applicants when distance or time precludes a visit to Brunswick, representing the College at local "college fair" programs, and, in general, serving as a liaison between the College and the public.

Those interested in learning more about the BASIC organization should contact Thomas L. Deveaux, associate director of admissions.

ALUMNI FUND

The Alumni Fund, inaugurated in 1869 and reorganized in 1919, has contributed more than \$20,000,000 for the current purposes and capital needs of the College through June 1984. Beginning with the 1984-1985 Fund, only current purpose gifts, expendable in the fiscal year in which raised, will be counted.

Officers: William F. Springer '65, chairman; Charles E. Hartshorn, Jr. '41, vice chairman.

Directors: William F. Springer '65 (term expires in 1985), Charles E. Hartshorn, Jr. '41 (term expires in 1986), David E. Warren '76 (term expires

in 1987), Edgar M. Reed '69 (term expires in 1988), H. Erik Lund '57 (term expires in 1989).

ALUMNI FUND AWARDS

Alumni Fund Cup: Awarded annually since 1932, it is given to the reunion class with the most money in the Alumni Fund. The award is presented in the fall.

The recipient in 1983 was the Class of 1943, Edward F. Woods, agent.

Leon W. Babcock Plate: Presented to the College in 1980 by William L. Babcock, Jr. '69 and his wife, Suzanne, in honor of his grandfather Leon W. Babcock '17, it is awarded annually to the class making the largest dollar contribution to the Alumni Fund.

The recipient in 1983 was the Class of 1918, George H. Blake, agent.

Class of 1916 Bowl: Presented to the College by the Class of 1916 in 1959, it is awarded annually to the class whose record in the Alumni Fund shows the greatest dollar improvement over its performance of the preceding year.

The recipient in 1983 was the Class of 1920, Ezra P. Rounds, agent.

Class of 1929 Trophy: Presented by the Class of 1929 in 1963, it is awarded annually to that one of the ten youngest classes attaining the highest percentage of participation.

The recipient in 1983 was the Class of 1976, David E. Warren, agent.

Robert Seaver Edwards Trophy: Awarded annually to that one of the ten youngest classes raising the most money for the Fund, this trophy honors the memory of Robert Seaver Edwards '00.

The recipient in 1983 was the Class of 1974, James M. Bowie, agent.

Fund Directors' Trophy: Established in 1972 by the directors of the Alumni Fund, the trophy is awarded annually to the class which in the opinion of the directors achieved an outstanding performance not acknowledged by any other trophy.

The recipient in 1983 was the Class of 1920, Ezra P. Rounds, agent.

SOCIETY OF BOWDOIN WOMEN

The Society of Bowdoin Women was formed in 1922. Its purpose is to provide "an organization in which women with a common bond of Bowdoin loyalty may, by becoming better acquainted with the College and with each other, work together to serve the College."

The society has made specific gifts to the College, such as silver and china for the presidents' house. In 1961 it established the Edith Lansing Koon Sills Lecture Fund, honoring Mrs. Kenneth C. M. Sills, wife of a former president

of the College, and in 1971, following the decision to admit women undergraduates, the society created a scholarship fund restricted to qualified women students. In 1983-1984 it gave six scholarships and an athletic award to undergraduates. Contributions have also been made to the Elisabeth Clark Wilder Scholarship Fund in memory of Mrs. Philip S. Wilder, a former president and longtime member of the society. Funds have also been used to increase the scholarship endowment; to add to the Daggett Book Fund in memory of Mrs. Athern P. Daggett, the vice president-at-large at the time of her death; to purchase equipment for the Office of Career Services; to co-sponsor the New York Contemporary Choreographers Series; and to sponsor the L. L. Bean fashion show featuring college models. In 1983 the society established the Frank F. Sabasteanski Polar Bear Run in honor of the longtime Bowdoin track coach.

Membership is open to any interested woman by the payment of annual dues of \$3.00. The programs and activities are made possible by the dues, contributions, and bequests.

Officers: Mrs. Dana W. (Jeanne D'Arc) Mayo, president; Mrs. A. LeRoy (Polly) Greason, honorary president; Mrs. Olin M. (Willie) Sawyer, vice president; Mrs. Edward M. (Judi) Good, secretary; Mrs. Leon A. (Wendy) Gorman, treasurer; Ms. Merilee Raines '77, assistant treasurer; Mrs. James R. (Judy) Flaker, activities coordinator; Mrs. William R. (Jennifer) Mason, assistant activities coordinator; Mrs. Mark (Sybil) Haley, nominating committee chairman; Ms. Judith Kerr Clancy '75, membership committee chairman; and Mrs. Robert C. (Joan) Shepherd, past president.

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